

A British advance in microprocessor usage TELESOFTWARE

Has British Management the will to exploit it?

The race is on to fit micros to new needs. Three key British breakthroughs at present put Britain ahead of the field.

1st Prestel, the Post Office's viewdata service linking home TV sets and other terminals, via the telephone, to central files.

2nd Viewdata Terminal Programming, CAP-CPP's telesoftware, -which enables those central files to hold computer programs for users.

3rd CAP-CPP's MicroCobol - a language which makes the same programs effective for users of different makes of microprocessor.

The use of the microprocessor.

An empty, naked micro has little value. It needs to be boxed to fit it to an application. Many of the newer applications depend upon the user having, readily available, selective information and software to apply the device to a particular purpose. For example an "intelligent" TV set can look up a library, play games, book hotels, order goods, record stock movements and keep a ledger, providing it is linked to the necessary data and programs.

The need for software.

Viewdata is the first national distribution service for the selective purchase of information to home TV sets and office terminals, at a cost related to local telephone calls. Our VTP telesoftware extends that service to the selective purchase of software and information by users of "intelligent" terminals, minicomputers and other micro-based devices. Such extension is only meaningful if the software for distribution will run on a great variety of devices using different micros. MicroCobol is the first of a new breed of hardware-independent programming languages built by CAP-CPP, a company that does not sell hardware.

The benefits.

Nearly all TV sets and office display units, plus many other industrial devices, will soon be based on micros that could be linked to the telephone. VTP enables viewdata to be exploited by the sale of locally-processed information by publishers, vendors and government (e.g. hotel availability and flight schedules by travel agents). The same service will be used by businesses to link their central computers to terminals in foremen's offices, branches, or agents' homes (e.g. mail-order houses for their sales agents, insurance companies for their field staff, merchants for their stores and production managers for their shop floors). It also provides an opportunity for British manufacturers to build electronic products that take advantage of this unique service.

Notice, viewdata has been sold abroad, thus opening the door for other exports.

These breakthroughs make a new marketplace for your products or services, plus

- * a selling platform
- * a vehicle for disseminating your company information
- * a data/software link to agents/branches
- * customer support for your micro-based devices
- * export opportunities.

But first you have to prepare for this market. That will take time - so start now before foreign competition catches up.

CAP-CPP can help you.

CAP-CPP is the software house that drew on 16 years of computing experience on over 2000 projects to develop the necessary software tools for this market. CAP-CPP'S VTP and MicroCobol are working now and they are backed by the

skills of 900 people - consultants, engineers, programmers. The group provides advice and programs for the exploitation of computers of all sizes. It does not sell computer hardware, but will help its clients buy and prepare the right equipment for their purpose.

A starting need is to prepare sample viewdata pages and a demonstration to explore the market, clarify objectives and to show management. In the next stage, pages and programs must be refined, checked-out and test marketed. Finally when your goal is certain the complete service must be commissioned.

For full information contact:-
VTP Services, CAP-CPP,
CAP House, 14/15 Great James Street,
London WC1N 3DY. Tel: 01-242 0021.

VTP will be demonstrated in London at the Viewdata Seminar in the Piccadilly Hotel, 21st - 23rd November, 1978.

CAP-CPP



"Now is the time to explore the role of our VTP telesoftware in your business. Our consultants, engineers and programmers have the means of helping your company create profits, jobs and exports through its exploitation"

Alex d'Agapeyeff
CHAIRMAN CAP-CPP

PARLIAMENT, November 2, 1978

Zambian assurance that British arms will be used only for defence: £20m advance for copper

House of Commons

The Zambian Government has given firm assurances that the British military equipment supplied them would be used for no other purpose than the defence of Zambia and would not be passed to any third party, Dr David Owen, Secretary of State for Foreign and Commonwealth Affairs stated.

Dr Owen, in his statement, said: When the Prime Minister and I met President Kaunda at Kano on September 22, I asked him to ask for our help in dealing with Zambia's economic problems and for military assistance, making it clear that he was turning to us in the first instance as a fellow member of the Commonwealth with which our country had had economic and defence relations since independence in 1964.

We discussed in detail the urgent problems they faced of obtaining maize, fertilizer and pest control which were needed to ensure next year's harvest. We also discussed the problems of the Benguela railway.

Zambia also faces severe economic difficulties arising from the low world price of copper and difficulties with her road and rail links to the sea. In the past, she has been the victim of raids deep inside Zambia on October 19 have reinforced the Zambian Government's concern about their national security and I have just heard of a further raid.

We have agreed to provide military aid to improve Zambia's defensive capability. The equipment and spare parts have already been supplied strictly for the use of the Zambian armed forces and police. More equipment is being detailed consultations with the Zambians.

We will also step up military training for Zambians in Britain. No British military aircraft will be stationed in Zambia.

The Zambian Government have given us firm assurances that the equipment will be used for no other purpose than the defence of Zambia and will not be passed to any third party, and the aid defence equipment will safeguard the integrity of the capital.

When we have established with the Zambians their exact needs, I will immediately tell the House the cost to the Zambians of the military assistance we are providing.

Parliamentary approval for this expenditure, which I expect to be of the order of £20m, will be sought in the Foreign and Commonwealth Office votes and will be sought in a supplementary estimate in due course.

The Government have agreed to help meet Zambia's urgent need for foreign exchange by making an advance payment now of £20m in respect of purchases of copper and British industry. We expect this copper to be shipped to Britain during 1980. The quantities, up to £20m in value, will depend on the contract prices at the time of delivery.

The copper will be resold to British buyers in such a way as not to disrupt the normal workings of the market. We have also offered technical assistance to Zambia to help in development of Zambian cobalt production.

The Benguela railway is due to be reopened on November 1. This should ease the problem of transporting Zambia's exports, including copper, and imports. We have offered financial assistance for improving the Zaire section of the Benguela railway and are offering technical assistance for the Angolan section.

I hope this assistance for Zambia at a time of great difficulty will strengthen her links with this country and the Commonwealth. (Labour cheers.)

Mr Francis Pym, Opposition spokesman on foreign and Commonwealth Affairs, said: The Zambian Government have given us firm assurances that the equipment will be used for no other purpose than the defence of Zambia and will not be passed to any third party, and the aid defence equipment will safeguard the integrity of the capital.

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The phrase appears in the statement about firm assurances that the equipment will be used for no other purpose than the defence of Zambia. Does that just mean the defence of Zambia proper and aircraft or the defence of terrorist bases inside Zambia?

If the latter, how can the Government defend this when the terrorists from these bases are killing innocent black and white Rhodesian civilians? (Renewed Conservative cheers.)

How is he able to be sure that these British weapons will be totally restricted to the defence of Zambia? Is there a distinction from air space? The phrasing of the statement is vague and it is certainly general.

Reference to the national security of Zambia and to improving Zambia's defence capability are vague and would be capable of wide interpretation. We would like him to be more precise about exactly what he means.

While the Zambian Government are undertaking what the Government of Zambia are doing, it is clear that the Zambian Government will be using every endeavour to get Mr Kaunda to make a peaceful settlement in Rhodesia as he has a vital stake at the present time.

We are questioning whether the Foreign Secretary has viewed the Zambian Government's statement about the central aim of the Government being to make a peaceful settlement in Rhodesia as he has a vital stake at the present time.

There has been no more difficult decision that I have had to take as Foreign Secretary than to take it. We have to take it in the whole context of an extremely grave and serious situation.

As to being precise I will go back to the statement I read to the House. In answers his point about guarantees. The Zambian Government, that is the government of Zambia, has given us firm assurances that the equipment will be used for no other purpose than the defence of Zambia and will not be passed to any third party.

The air defence equipment will safeguard the integrity of the capital. I believe that is quite clear.

Of course Mr Pym can ask me how I can be absolutely certain. I have, as the House has, in this statement, made a statement of the integrity and the word of honour of the Government of that country. I for one am prepared to stand by the country and President Kaunda and the Zambian Government. (Labour cheers.)

Mr David Steel, Leader of the Liberal Party, said: The Zambian Government have given us firm assurances that the equipment will be used for no other purpose than the defence of Zambia and will not be passed to any third party, and the aid defence equipment will safeguard the integrity of the capital.

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Dr Owen—It is a subject for great regret among all MPs that in this dispute many hundreds of innocent people on both sides and in many different countries are losing their lives, some as a result of bombing and other military attacks and some just as a result of indiscriminate killing. There can be no one in this House who does not want to achieve a peaceful and negotiated settlement.

That is going to be extremely difficult, but it is not forgotten that a few people in southern Africa have played a more significant role in the settlement than the vast majority of the population. The whole history of the various initiatives he has taken point to the fact that this man is prepared to take political risks to achieve a negotiated settlement for Rhodesia.

Mr Reginald Maudling (Baronet, Chipping Barnet, C)—Before agreeing to supply arms, did he seek from President Kaunda an assurance that he would do the utmost to restrain the activities of the guerrillas who are using the relative safety of Zambia as a base for their operations? By British arms, to conduct a campaign of terrorism and murder in Rhodesia. If not, why not?

Dr Owen—Mr Maudling and many others here know President Kaunda. He has made clear on a number of occasions his dislike for the guerrillas and his support for the British arms, to conduct a campaign of terrorism and murder in Rhodesia. If not, why not?

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Urgent inquiry into prison system: Home Secretary attacks unofficial action by warders as indefensible

The Government's decision to set up an inquiry to consider the causes of the present situation in the prison system was announced by Mr Roy Jenkins, Home Secretary, in a statement.

He said that the inquiry would examine the organization and management of the prison system in the United Kingdom, including its use of resources and working arrangements, conditions in prison service establishments and the structure, pay and conditions of service.

The Secretary of State for Scotland and Northern Ireland and I are consulting the appropriate staff associations. The inquiry will be a wide-ranging report done with urgency. There is no reason why the matter be raised should not be looked at. It has been looked at, rejected and it should be looked at.

Mr Robert Kilroy-Silk (Ormskirk, Lab)—Why has it taken so long to act? Why is it that the Government always must be seen to be acting under pressure? The prison crisis is a long-standing one. The consequence of the prison officers' action has been much more serious a deep-rooted crisis in the prison system. It has the effect of disrupting the criminal justice system as well as the running of the prisons themselves.

The Government make clear that such action cannot be allowed and while the establishment of this inquiry they expect all staff to work normally and to the best of their ability. The inquiry will be a wide-ranging report done with urgency. There is no reason why the matter be raised should not be looked at. It has been looked at, rejected and it should be looked at.

Mr William Whitelaw, chief Opposition spokesman on home affairs (Leamington, C)—We have heard in the last few days that the inquiry will be a wide-ranging report done with urgency. There is no reason why the matter be raised should not be looked at. It has been looked at, rejected and it should be looked at.

Mr David Steel, Leader of the Liberal Party, said: The Zambian Government have given us firm assurances that the equipment will be used for no other purpose than the defence of Zambia and will not be passed to any third party, and the aid defence equipment will safeguard the integrity of the capital.

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which in our sort of society should be a matter of people being refused admittance to prison. On the Isle of Wight prison officers are deciding who should go in and who should go out. That is indefensible.

Mr Stephen Ross (Isle of Wight, Lab)—We welcome the decision to set up the inquiry. It will be welcomed in my constituency, Portsmouth, where there is a long tradition of good service in the prison service.

The fact that we have had this dispute of 11 months at Parkhurst reveals the extent to which morale has dropped within the prison service. Can he give an undertaking that the government will accept recommendations of the inquiry?

If the prison officers are to resume working they will want an undertaking of that sort. Mr Ross—The prison officers can put their case to the independent inquiry. It will be a wide-ranging report. It is in the context of a wide-ranging report which is rather different from other reports. It is better to let it lie. If there is a case, let it be put. It is my office will also put a case. It has to be looked at from all sides.

Mr Edward Lyons (Bradford, West Lab)—We all hope the inquiry will do good but in the end no great improvement can be expected without new prisons and new staff. The Government are proposing to increase prison building and reducing overcrowding? Mr Ross—We are spending £23m

on new construction and £5m on repair and maintenance of existing premises and the present plan for the next four years will produce another £450m. Even if new prisons were to be available tomorrow morning there is still a problem. That is what we want to look at.

Mr Edward Gardner (South Fylde, C)—Why has the Home Secretary allowed the present discontent and the dangers which attend it to mount to its present peak without taking action? He has had well over a year of warnings that this kind of situation would arise. Will he be dealing with it in the inquiry?

Mr Ross—Overcrowding will arise automatically. It does give evidence to the inquiry. It will be found there is far more to this matter than just the normal aspects of resources, equipment and buildings.

Mr John Ryman (Rivdale, Lab)—Many members of the Prison Officers Association have alleged that an inquiry into the prison service is a waste of time and money. They are saying that money has accrued over a period of two years. Would he consider making an interim payment to these prison officers pending the report of the inquiry?

Mr Ross—I know about the arguments in a special case. Prison officers are insisting that they are negotiating with directly and that it should not be done through the Prison Officers Association. I am not prepared to do that. It must be done through the normal channels.

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on new construction and £5m on repair and maintenance of existing premises and the present plan for the next four years will produce another £450m. Even if new prisons were to be available tomorrow morning there is still a problem. That is what we want to look at.

Mr Edward Gardner (South Fylde, C)—Why has the Home Secretary allowed the present discontent and the dangers which attend it to mount to its present peak without taking action? He has had well over a year of warnings that this kind of situation would arise. Will he be dealing with it in the inquiry?

Mr Ross—Overcrowding will arise automatically. It does give evidence to the inquiry. It will be found there is far more to this matter than just the normal aspects of resources, equipment and buildings.

Mr John Ryman (Rivdale, Lab)—Many members of the Prison Officers Association have alleged that an inquiry into the prison service is a waste of time and money. They are saying that money has accrued over a period of two years. Would he consider making an interim payment to these prison officers pending the report of the inquiry?

Mr Ross—I know about the arguments in a special case. Prison officers are insisting that they are negotiating with directly and that it should not be done through the Prison Officers Association. I am not prepared to do that. It must be done through the normal channels.

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HOME NEWS

Only 2% of employers 'train women for formerly male jobs'

By Annabel Ferriman

Only 2 per cent of employers have trained or encouraged women to take jobs in traditionally male areas, according to a survey of 575 of Britain's largest companies carried out by the Equal Opportunities Commission.

The commission says in a report, to be published next week, that it finds the survey results largely disappointing. Most big employers had taken steps to avoid unlawful discrimination, but few had shown understanding of the root causes and the concept of indirect discrimination.

The survey is to be used at regional seminars being run by the commission for industrialists and trade unionists, the first of which is opening in London today. The others are to be held in Nottingham, Manchester, Leeds, Cardiff and Birmingham.

Only seven employers of the 575 who replied to the survey had made use of the clauses in the Sex Discrimination Act that make positive discrimination lawful in certain circumstances. Employers may provide special training facilities for women and encourage them to apply for certain jobs if they have been under-represented in those jobs in the past.

Most of the examples of lawful positive discrimination given by companies consisted of positive encouragement to women in management, but one employer mentioned positive action for women seeking applicants for its craft and technician training.

The commission commends Rolls-Royce for encouraging girls to take up apprenticeships and for implementing a management development programme "which is particularly useful to women."

in their late twenties and early thirties. It criticizes trade union attitudes as a barrier to such progress. "Union opposition to providing compensatory training was notably strong in the printing industry," the report says.

Although 39 per cent of the companies that replied maintained an analysis of their work force by sex, only 4 per cent had made use of its specifically to monitor equal opportunities within their organizations.

One of the few companies to adopt a positive approach was J. Sainsbury, which has a system identifying areas for action. As a result, in the past four years the company had increased the number of women in middle and senior management grades from 41 to 89, the report says.

The commission regards an end to job segregation, now widespread in industry, as vital for progress towards equality. Opposition, sometimes from both sexes, to the Equal Pay Act was mentioned by some employers. One employer said it had increased costs, leading to redundancies.

"However," the report says, "one very large organization estimated that the ongoing addition to the pay roll was just over 2 per cent. Only 5 per cent of the employers had taken steps to identify the extent to which discrimination, perhaps unwittingly, may be perpetuated."

The commission recommends action that companies should take to identify the extent to which discrimination, perhaps unwittingly, may be perpetuated. Monitoring, an end to job segregation and the provision of day-care facilities and part-time work were also recommended.

Butter price cut may mean hoards in freezers

By Hugh Clayton

Payments to finance early cuts in British butter prices have been authorized by EEC farm ministers, Mr John Silkin, Minister of Agriculture, Fisheries and Food, said yesterday. His announcement in a parliamentary written reply removed the last obstacle to introduction of a temporary subsidy in Britain worth 6p a pound.

Mr Silkin said the payments would apply to 51,000 tonnes of butter from creameries in the EEC and thus 17,000 tonnes of New Zealand butter would also be reduced by a different method. Although the price cut will not last for more than 11 weeks, Mr Silkin's officials said that no measures had been taken to prevent hoarding by owners of home freezers.

The ministry's latest advice about home freezing, published in May, is that salted butter can be stored for three months and unsalted butter for six. "An occasional offer at reduced price may make a bulk purchase worthwhile," it says. "An official offer of choice of purchasing by freezer owners, but the amount to be subsidized was so great that there should be enough for everyone. There will be no rationing or voucher system," he said.

Butter prices may rise sharply next spring even though the European Commission wants to hold down all milk product prices because of the intractable dairy surplus in the Community. Butter already carries a subsidy of £145.86 a tonne, which will last until March.

The temporary subsidy that is about to start will be worth a further £126.48 a tonne. If both were removed at once the shop price of butter would rise by more than 10p a pound, from its present level of 54p to 78p a pound.



Mr Reginald Mandling voting at Oxford yesterday in the first day of polling among MAs of the university to find a new professor of poetry.

Actress tells jury of her nightmares

Miss Irene Gort, an actress with the National Theatre, told a jury in the High Court yesterday that she had nightmares after being questioned for six hours by Miss Vanessa Redgrave and other leaders of the Workers' Revolutionary Party.

She said: "I was screaming out in the middle of the night. Vanessa came over to me and said: 'Do not worry, comrade. It is only a dream.' She said she suffered her ordeal at the WRP's political school in the Peak District.

Miss Gort was giving evidence for the defence on the eighth day of the libel action brought by Miss Redgrave and five other leading members of the WRP against *The Observer* and Mr David Astor, its former editor. Mr Justice O'Connor is presiding.

The WRP members complain that an article published in September, 1975, describing events involving Miss Gort said to have occurred at the school, made them out to be violent and unkind. *The Observer* and Mr Astor are contesting the claims for damages.

Miss Gort said she went on a course at the party's school against the advice of her former friend, Mr John Gale, an impresario, who was unhappy about her membership of the WRP.

He told her that the WRP was idealistic, did not use, and that people would not employ its members because they were a lot of trouble. At the school she was questioned about Mr Gale and accused by Roy Battersby, a theatre and film director, of being a Special Branch spy, she said.

She said she was terrified by the questioning. "I was really frightened. I was crying, hysterical."

When she tried to leave, she was pushed back into her chair and told, "How dare you try to leave when you are being questioned by the central committee. How dare you bring your middle-class arrogance here."

Miss Gort continued: "I said I did not want to stay in a place that intimidates people to that extent and virtually encourages Stalinist-type treatment."

She said she decided against going to the police. She sought the advice of Mr Peter Plowden, general secretary of Equity, the actors' union.

Then *The Observer* was called in. Miss Frances de la Tour, a comedy actress and a member of the WRP, said in evidence that there were no arms caches at the political school of the party.

She took her daughter aged 18 months to the first course at the school and there was no suggestion that mothers should not put the party before their children.

Mr Colin Ross-Murray, QC, opening the defence for *The Observer* and Mr Astor, said it was an inevitable part of his case that the WRP generally, and the six plaintiffs in particular, were so used to using extreme, violent and exaggerated language, so suspicious of people planning things on their own, and of conspiracies against them, that they could not see where fact ended and fantasy began.

He said the WRP members had tried to set the maximum political capital out of *The Observer* article, and out of the police raid on the school on the eve of its publication.

The hearing continues today.

Half-mortgage plan likely for the Navy

From Our Own Correspondent, Birmingham

Serving officers and ratings in the Royal Navy are expected soon to be offered the facility of half buying and half renting their married quarters under a proposal being considered by the Ministry of Defence.

Mr Frederick Mulvey, Secretary of State for Defence, is understood to favour the radical mortgage scheme and to want it to be extended to the Army and RAF.

It is thought that it will provide a useful incentive to recruiting and a counter to manpower losses by encouraging young men to get into the housing market at an early stage.

Lieutenant-Commander (retired) John Hughes, housing officer for Naval Home Command, Portsmouth, has worked on the scheme with the Abbey National Building Society. If half the offers are accepted by sailors mortgages of about £35m would be involved.

The nationwide and the Halifax building societies are expected to be involved with the other two services.

The scheme is based on that pioneered in Birmingham three years ago. An applicant buys half the equity of a house on a mortgage at the current interest rate and at the same time pays half the reasonable rent of the house. Under the Birmingham scheme an occupier can buy the freehold at any time to make his ownership complete.

The Royal Navy has about 16,500 properties, mainly three-bedroom semi-detached houses and maisonettes each worth between £10,000 and £14,000. There are 4,000 at Plymouth, 5,500 at Portsmouth, 1,000 at Chatham, 1,000 at Rosyth, 1,000 at Garioch and the rest in groups throughout the country.

A rating or officer involved in the scheme would when moved keep his involvement going and his family together on what is called a "roof-to-roof" basis at no legal cost.

It is hoped to persuade young men on long-term engagements of 22 years or to be involved at an early stage of their careers after marriage, the Navy buying back from them when they leave the service. That would give them considerable capital for investment in the ordinary housing market.

The Navy also has a scheme for senior ratings that enables them to have an interest-free loan of £3,500 to help them buy their own home.

About 86 per cent of officers and 53 per cent of married ratings already own their own homes. At present a fully furnished married quarters costs £240 a week. Under the new scheme it would cost £420 rent plus mortgage, making a total of about £1210 a week. That is less than the national average. The take-home pay of an able seaman is £46 a week.

Gatwick to have new terminal at airport

By Arthur Reed, Air Correspondent

The British Airports Authority is to spend £18m on a new pier terminal at Gatwick, the second London airport, and is to publish proposals for a second terminal next year.

Construction of the pier, which will replace the north pier, is to start in the middle of 1979 and should end in 1982. It will have space for 1,200 passengers an hour and eight jumbo jets.

The central pier at Gatwick has been rebuilt to accommodate 11 airliners, and discussions on the modernization of the south pier are taking place.

A second terminal at Gatwick would be able to handle about nine million passengers a year, bringing passenger capacity at the airport to about 25 million a year. It is almost certain that the proposal will be examined by a public inquiry.

The airports authority has spent £100m modernizing Gatwick. The fact that it is planning further improvements indicates that the policy of extending the airport will continue, although some airlines are reluctant to move there to relieve congestion at Heathrow.

The Department of Trade would like all services between London and the Iberian peninsula transferred from Heathrow to Gatwick from the spring, but British Airways has indicated its willingness, Iberia, the Spanish airline, and TAP, of Portugal, have refused.

Both airlines believe that congestion at Heathrow could be eradicated by better use of the existing terminal facilities. Iberia and TAP, averted a transfer when the High Court ruled that the order instructing them to move to Gatwick from April 1 had no legal force.

The Department of Trade is considering whether to issue a variation of the airlines' operating permits under article 58 of the Air Navigation Act. The airlines have indicated that they would resist that vigorously in court.

The authority has had to tell the committee of airlines that allocated take-off times at Heathrow not to give the times occupied by Iberia and TAP in other airports, as had been intended when the order to move was issued.

Although the authority still hopes that the transfer will take place by the spring, no talks are planned. Negotiators from the Department of Trade went to Madrid last week for discussions, but no progress was made.

If Iberia and TAP remain at Heathrow, British Airways will reconsider its position. It is thought most unlikely that the airline would make the move alone as in spite of the improved facilities at Gatwick, it would be at a strong commercial disadvantage and would lose many passengers.

Bail for three detectives on drug charges

Three suspended detectives from Scotland Yard's drug squad were remanded on bail totalling £10,000 each until December 13 at Horseferry Road Magistrates' Court, London, yesterday, accused of conspiracy and theft of cannabis that had been seized by the police.

Det Chief Inspector Anthony Rich, aged 32, of Airline Gardens, Kensington; Det Inspector David Draper, aged 34, of Fernleigh Road, Wood Green, and Det Sergeant Kevin Carrington, aged 31, of Strathmore Gardens, Haringey, are charged with conspiring with others between February 13, 1976, and March 23, 1977, to contravene provisions of the Misuse of Drugs Act, 1971.

They are also charged with stealing 25.3 kg of cannabis resin and 23.2 kg of drug belonging to the Commissioner of Police.

Sergeant Carrington alone was further charged with three offences of stealing and receiving cannabis resin.

Counsel for Mr Draper asked that no photographs of the three officers should appear in the press. "If their photographs are published in the press there are numerous people, such as informers, whose lives could be in jeopardy by talking with these men," he said.

The magistrate agreed that lives might be in danger.

Police officers on murder inquiries suspended

Two detectives on the inquiries into the murders of women in West Yorkshire have been suspended from duty. Both are constables engaged in taking statements from the public.

Mr Austin Haywood, Deputy Chief Constable of West Yorkshire, said the report would be submitted to the Director of Public Prosecutions. He confirmed that both officers had been suspended and had since tendered their resignations. He said both were working on what was known as the Ripper investigation, based in Leeds, at the time.

One officer was initially stationed in Bradford but moved to Leeds after being

seconded to the murder inquiry squad. The second one, who was stationed at Pudsey, was also brought into the team.

Senior officers believed to have launched an internal inquiry after apparent discrepancies had been found in statements taken by the officers from the public. The inconsistencies were noticed, a former source said, when certain statements were double-checked.

Senior officers have said that other officers were having to repeat inquiries. A colleague of the two officers said they were "cutting corners" to save public embarrassment. The officers face not only disciplinary proceedings but possible criminal ones as well.

Man jailed for prison break-in

Martin Rafter, aged 42, unemployed, of no fixed address, was sent to prison for six months by magistrates at Highbury, London, yesterday for breaking into Holloway prison and stealing food.

"Not even an Irishman in his right frame of mind would break into a prison," Mr Rafter was told by the judge. "I am sorry for all the trouble I have caused."

Wife who hid body has sentence halved

Mrs Eileen Finlay, who was said to have hidden her husband's body in an airing cupboard for 19 months, had her two-year jail sentence, passed on May 12, halved by the Court of Appeal yesterday.

The court held that the sentence on Mrs Finlay, aged 29, of Bury Road, Rochdale, Greater Manchester, for obstructing a coroner and leaving a corpse unburied, was too long.

The reduction to 12 months would speed the reunion between her and her two young children, Mr Justice Phillips said. He was sitting with Lord Justice Browne and Mr Justice Michael Davies.

Mr Justice Phillips said that according to the wife, Mr Finlay blamed her for the deaths of their three children. When he threatened to kill himself in August, 1975, she threw some pills at him and "told him to get on with it". She later found him dead.

National Theatre staff go back

Stage staff at the National Theatre in London returned to work yesterday morning after a withdrawal of labour of 100 staff stopped performances the night before.

Their action followed rejection of a management proposal for a change in the work pattern that would allow the staff to work 7½ hours less a week for the same pay.

Prebendary Chad Varah, 'the only man in the world who dare not commit suicide'

The Samaritans, the organization that tries to help people tempted to suicide, celebrated yesterday the twentieth anniversary of its founding.

Prebendary Chad Varah, aged 66, its founder and director until 1974, spoke about the work he and his helpers have done.

"It all started because I was a precocious child who hated ignorance," he said. "I was sickly, so I spent a year in hospital and a year convalescing, and read every book I could lay my hands on."

"I must have been the only boy at my school who knew that boys masturbate, and that it does you no harm whatsoever. I was able to allay the fears of several of the others at school."

He planned to ask the Post Office for an easily remembered number. "When I arrived at the church, there it was: 011-9000."

Mr Varah built up an organization that now has 167 branches in Britain, 20,000 helpers, and sister organizations abroad.

Only one caller in eight needs help beyond what the Samaritans can give, and is offered professional advice. "We try to act as a wise friend who is with you while you work out your own solution to your own problems," Mr Varah said. "It has to be the right solution because you worked it out yourself."

That friendly detachment is the secret that has pulled countless thousands of people back from the brink of suicide. There are many circumstances that can drive a person towards suicide, Mr Varah said. "We all give hostages to fate and when they go we are at our breaking point. Every man has one. Except me. I am the only man in the world who cannot commit suicide. It would discourage too many people."

Playgroups 'no substitute for nursery schools'

By Our Education Correspondent

The development of playgroups for children under five is no substitute for provision of proper nursery schools run by qualified teachers, the National Association of Head Teachers says today. It calls on the Government and local authorities to launch a campaign for more nursery schools.

Only a third of three-year-old and four-year-old children are in nursery schools, nursery classes or reception classes of infant schools, the association says.

The association deplores the wide disparity in nursery school services provided by different local authorities. Excluding the "rising-fives" in infant schools, Manchester provided most with 42 per cent of children aged three and four in nursery classes.

But some authorities made virtually no provision at all: the London borough of Bromley catered for only 0.9 per cent of the age group, and Wiltshire for 0.3 per cent.

New BBC radio service for Wales

By Kenneth Gosling

The first real improvement in the BBC's Welsh broadcasting services for 41 years takes place on November 13 with the launching of Radio Wales, a new VHF, will be expanded; the third and fourth tiers will be community and neighbourhood radio services.

It is the first stage of a plan for a four-tier broadcasting service for Wales. At about the same time next year, Radio Wales's Welsh language counterpart, the Radio Cymru service on VHF, will be expanded; the third and fourth tiers will be community and neighbourhood radio services.

Radio Wales, whose development has created 60 jobs in Cardiff, will cost an extra £400,000 a year to run. It will broadcast all day in English and have a distinct identity from Radio Cymru during the day: at night the two will usually combine as a bilingual service.



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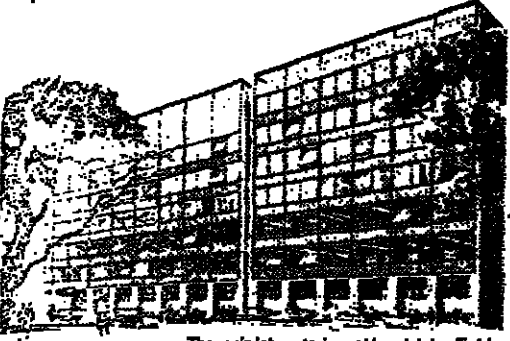
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مكتبة الأمل

EST EUROPE

Italy is feeling its way
in the crossroads
between rival systems

Peter Nichols
Nov 2

Italy has a certain courage to take a realistic and yet optimistic appraisal of its position in international affairs when the politicians are easily lulled into complacency. It is all of yet another Government by the end of the year.

The immediate reactions to the economic debate in the Chamber on Tuesday, only of the Communists, are an optimistic appraisal of the situation. The Prime Minister, managed to save his party's Christian Democratic position from defeat on a vote arising from wage rises by the hospital workers. He had some trouble with opponents within his party, the Communists, that he held down important principles in insisting that the public sector should be kept strictly within limits laid down in the national economic plan while responsibility for decisions should be under control of the Treasury.

According to Signor Ferruccio Di Giulio, the leader of Communist deputies, the Minister's firmness on the issue could lead to the success of a wage policy would also help to reform the structure of the state.

His reaction echoes, however, faintly, the expression of doubt by Signor Piero De Michelis, a leading Christian Democrat, who after the killing and murder of Aldo Moro, the late chairman of his party, has analysed at length the role of Italy.

He publishes his results in a book consisting of answers in reply to the questions of journalists, Signor Carlo

It is clear that the Italians are absolutely "to be governed well," in favour of the present system which turns round the understanding between the Christian Democrats and the Communists. "It is painful to think this policy of which was inspired and directed—has been sealed with blood but today certainly appears to be the policy chosen by the Italian Democrats and by country."

He understands the difficulties that arise internationally in Italy's need to turn to its future. Italy is not far from a new Vest, but at the same time

OVERSEAS

Cosmonauts
back after
140 days in
space

From Our Own Correspondent
Moscow, Nov 2

Two Soviet cosmonauts returned to earth this afternoon after four and a half months in space, breaking the endurance record by 44 days and earning themselves the title Hero of the Soviet Union, as well as the Order of Lenin.

Commander Vladimir Kovalev and Mr Alexander Ivanchenko were reported after a preliminary medical check-up to have withstood well the long flight aboard the orbiting space station Salyut 6. They landed at 14.05 Moscow time (11.05 GMT) in Soviet Kazakhstan.

Their flight began on June 5 from the Baikonur cosmodrome. During their stay in space they were several times visited by space crews and un-manned cargo ships which took advantage of Salyut's double docking facility to bring essential food, fuel supplies and experimental scientific equipment. Two of the visiting cosmonauts were from Eastern Europe—one from Poland and one from East Germany.

During the flight the cosmonauts took thousands of photographs of the earth's surface, especially of Poland and the Soviet Union which Soviet scientists say are of great importance in studying seasonal changes and natural vegetation.

They conducted more than 50 technological experiments in weightlessness to produce new semiconductor optical materials and metal alloys. They also went for a walk in space to dismantle equipment installed on the outside of the station and recorded numerous broadcasts for Soviet television.

Soviet scientists have already predicted that it will be rather difficult for the cosmonauts to readapt to the earth after such a long period—140 days of weightlessness. In the past few weeks the pair had to put on vacuum suits every day to get the blood circulation down to their legs. Previous cosmonauts have spoken of the lethargy, giddiness and heaviness they felt on their return.

One of the most puzzling discoveries of this long flight was that it appears to have given the two cosmonauts amazing powers of sight. In a report from the mission control centre a few days ago it was disclosed that on one occasion the two, flying at a height of 180 miles, were able to distinguish a depression only about 20 to 30 metres wide in a glacier.

In a second experiment they reported that another glacier was 200 metres from a specified point, and scientists on earth established that they were correct to within a few metres.

Nyerere pledge to
hit back at
'that savage Amin'

From Charles Harrison
Nairobi, Nov 2

President Julius Nyerere of Tanzania said today that his country now had only one task—to hit back at President Idi Amin of Uganda.

"We have the ability and the intention to do so," he added. "Amin is a savage—he has killed many of our people."

Ugandan forces were earlier reported to be holding the road bridge over the Kagera River at Kyaka, western Tanzania, after yesterday's Ugandan announcement that it had annexed 710 square miles of Tanzanian territory. President Amin says his forces took the area in retaliation for earlier Tanzanian incursions into Uganda.

President Nyerere said he wanted to give a review of the conflict in order to dismiss the lies being put out by the Ugandan President.

He confirmed that Tanzania had shot down three of its own aircraft after they lost their way and flew over anti-aircraft batteries at Musoma.

Dr Nyerere said three Ugandan aircraft had been shot down by the Tanzanians—one last Thursday, and two on Friday—after bombs had been dropped on Kyaka, on the Kagera river.

In his speech to Government ministers, party leaders and military chiefs, Dr Nyerere appealed to all those who had offered to mediate to understand Tanzania's position and stop their efforts. "We do not want to fight him (Amin)," he said. "But now we are going to fight until this snake is out of our house."

Tanzania is reported to be building up its forces in the border area. It appears to be planning an assault to dislodge the 2,000 to 3,000 Ugandan troops now dug in along the Kagera river.

This morning Uganda radio attacked Britain, claiming that it had taken the side of Tanzania, having all along joined with Tanzania in numerous invasions of Uganda.

Callaghan aid sought: Speaking by telephone to reporters in Nairobi, Major Bob Astles, President Amin's British-born aide, said the President wanted Mr James Callaghan to mediate. From the presidential villa on Lake Victoria, Major Astles said the Ugandan leader felt Mr Callaghan was the only person capable of settling the conflict.

Dr Owen relies on Kaunda
guarantees over arms

Continued from page 1

path against any aid whatsoever. Dr Owen said that it was no use trying to resist the spread of the influence of others if Britain was not prepared to stand up and be counted when it was asked for help.

This decision was the most difficult he had had to take as Foreign Secretary but it had to be taken in an extremely grave situation. He assured anxious MPs who were insisting on the defence of the country that the Rhodesian raid deep into Zambian territory, that President Kaunda had given Britain firm assurances that the military equipment would be used only for the defence of the country and would not be passed to any third party.

No British service men or aircraft would be stationed in Zambia. The air defence equipment would be safeguarded by the Rhodesian air force. Mr Joshua Nkomo, the joint leader of the Rhodesian Patriotic Front, had just been in Moscow. The provision of those weapons was tantamount to collusion between Britain and the Soviet Union.

Parliament, page 4

Hanoi reports war flare-up
and seeks Moscow's aid

Moscow, Nov 2.—Mr Brezhnev and Mr Koyagin, the Soviet leaders, today met Vietnamese leaders amid reports that heavy fighting had broken out on the Vietnam-China border.

Tass said the Kremlin talks with Mr Le Duan, the Vietnamese Communist Party leader, and Mr Phan Van Dong, the Prime Minister, were taking place in an atmosphere of cordiality, despite the frankness and mutual respect.

Although the Tass report made no mention of Hanoi radio reports of heavy fighting between Vietnamese and Chinese troops in the border area, a thinly-veiled reference to China said: "The sides noted with concern negative moments in the development of the international situation—in particular in the Far East and in South-East Asia."

"In their common opinion the policy of repulsing aggressive ambitions and attempts of force pressure on independent states is the only correct and substantiated policy," Tass said.

Mr Le Duan and Mr Phan Van Dong arrived in Moscow yesterday on a special Aeroflot



Lenin dominates preparations for the Red Square parade next week.

Camp David opponents find strong ally as Baghdad summit opens

From Robert Fisk
Baghdad, Nov 2

Arab kings and presidents gathered in the high-ceilinged hall of the President's palace in Baghdad tonight for what should have been the summit of the Arab League. It is all the anger that had preceded it in Syria, Libya and among the Palestinians that culminated here, then perhaps the narrow passage between the two conference tables tonight to view from two yards away, the presidents and shalks of the Arab world as they sat, in waxworks attitudes of attentiveness and con-

Cornered by a BBC television crew, King Hussein talked briefly of "living up to the challenge" that faced the Arab world, but hesitated when he was asked what the future was for Egypt. "We are still at the beginning," he said, but went no further.

There was, of course, no doubt that the summit faced in President Al-Bakr's words—"an unprecedented and critical division in the Arab world", and this division was made all the more dramatic by the gathering here in Baghdad.

With the exception of Egypt, which was not invited by President Al-Bakr, only six leaders were noticeably absent from the conference's opening.

One was Mr Yasser Arafat, leader of the Palestine Liberation Organization, whose arrival

Mr Carter fits
in meeting
with Mr Begin

New York, Nov 2.—President Carter changed his plans and made arrangements to meet Mr Menachem Begin, the Israeli Prime Minister, in New York this afternoon, a White House official said.

Mr Carter, who campaigned for Mr Hugh Carey, the Democratic Governor of New York, at a Wall Street rally, planned to speak with Mr Begin at the home of Mr Arthur Kravitz.

Mr Kravitz, a Democratic fundraiser and former chairman of the board of United Artists, was giving a reception for supporters of Mr Carey after the rally.

Until shortly before the meeting, the White House had denied that the President had any plans to meet Mr Begin.

When asked by reporters earlier whether he was intending to meet Mr Begin by not meeting him here, Mr Carter said: "This is a political visit and not a state visit. Begin and I are very close friends."

Mr Begin said today that he had made no progress in the talks with the United States.

Mr Begin and Mr Cyrus Vance, the United States Secretary of State, met for two-and-a-half hours today.

United States sources said that the outstanding issues included: the language to describe the link between the bilateral treaty and a West Bank settlement; the terms under which this treaty would supersede Egypt's previous commitments to other Arab states; the timing for the establishment of full diplomatic relations.—Reuters and AP.

Lebanese minister escapes
ambush by rightists

Beirut, Nov 2.—Rightist Lebanese Army dissidents ambushed Mr Fuad Butros, the Foreign and Defence Minister, today, apparently to avenge the death of their leader in a government-ordered raid.

Mr Butros escaped unharmed but at least five people were reported wounded in a gun battle between the dissidents and his military escort outside his home in the Christian district of Ashrafieh.

Sources said that the dissidents opened fire shortly after Mr Butros had boarded his car to be driven to the airport, escorted by two jeeps in front and two behind.

His body guards returned the fire and in the battle at least four of them were wounded. The fifth casualty was a civilian passer-by, the rightist Phalangist radio reported. Eye-witnesses said that the attackers escaped.

Mr Butros and President Elias Sarkis later left for the pan-Arab summit in Baghdad.

The attack came after the death yesterday of Captain Samir al-Ashkar, one of 12 dissident officers recently ordered to stand trial on charges arising from the 1975-76 civil war.

He was killed when the military police raided the headquarters of his "Revolutionary Command of the Lebanese Army", north-east of Beirut. One of his aides was wounded and 13 officers and men were arrested.—Reuters.



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onn decides belatedly to
come a cultural capital

Patricia Clough
Nov 2

It was "not a happy situation," President Scheel complained to a gathering of artists last year, that visitors to Bonn should have to travel in Cologne or Düsseldorf to see something of German culture.

Since this sleepy market and university town unexpectedly became the federal capital after the Second World War, efforts have been made to cater for the influx of new residents. There are, periodically, good concerts but the theatre has remained that of a medium sized provincial town. Efforts by President Scheel to establish an annual festival of German theatre have failed because of the cost.

The idea of a national gallery in the federal capital would be a foregone conclusion in other countries. But for the Government and for most Germans Bonn is the cultural and spiritual centre of our nation... this status will not be affected by the building of an art gallery in the federal capital.

Herr Baum said today: "Bonn is, and remains, the cultural centre of our nation... this status will not be affected by the building of an art gallery in the federal capital."

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Clinic tackles Russia's ignorance about sex

From Michael Binyon
Moscow, Nov 2

Sex is a subject the Russians find hard to discuss in public. For years it was officially assumed in idealized portrayals of family life that when young people met and fell in love a combination of Soviet morality and natural instinct would see them safely into a lifelong marriage.

But the soaring divorce rate, the falling population and the high social and emotional costs of frequent abortions have persuaded sociologists and doctors that widespread ignorance about even the most elementary facts of sexual relations can no longer be tolerated.

And so sex education has begun cautiously to make its way into Soviet schools and clinics.

The subject is still surrounded by taboo; sex education for example is generally called hygiene education. But in recent months the Soviet press has been increasingly frank in pointing out the need for more and better information, for proper family planning advice and for medical consultations with teenage girls to warn

republics have taken the lead in sex education. Recently the weekly magazine *Nedelnya* told how one clinic in Riga was so appalled by the frequent breakdown of marriages caused by sexual problems that it decided to set up its own school advisory service.

Soviet surveys show that premarital sex among Russians is fairly common and that in private Russians certainly have fewer inhibitions about sexual activity than the official propaganda of Soviet morality would suggest.

The Riga clinic for family problems was worried by the growing number of infertile women who came for help. Dr Nadezhda Likhachova believed this to be the cause of unhappiness in families, but said couples usually came for advice too late, after 10 or 15 years of marriage without children.

She urged couples to come within the first year, for the reason she strongly felt should be impressed on them was that nothing should interfere with the first pregnancy. Too many abortions severely reduced the chances of a young woman ever conceiving.

It is notable that abortion

Union as a normal and acceptable method of birth control. The Riga clinic points out that there are other ways. "We give them means which modern medicine has," Dr Likhachova said. But neither the pill nor contraceptives are easily obtainable in the Soviet Union.

The clinic found the number of abortions to be rising, and called for a campaign to educate teenage girls of the dangers.

With the permission of the Ministry of Health doctors interviewed 5,000 fourteen and fifteen-year-olds, giving them individual advice on sex and family planning. *Nedelnya* suggested that there were objections from parents and school principals. But the campaign was accompanied by advice to parents that this was for the health of their daughters and future grandchildren.

At the same time the clinic found adult couples who came for advice not at all prepared for sexual relations. This was particularly true of men, for whom there were no special consultation clinics.

The clinic therefore got permission to run sex education classes in local schools. *Nedelnya* recorded the pupils' initial embarrassment. They used to

look furtively down the corridor before diving into the room where the doctor was holding his consultations. But once inside they found an atmosphere of warmth and good will.

Riga's example is not yet the rule. On the whole Soviet publications on sex tend to talk vaguely about education of the cultural and social personality, and learning to respect human dignity. All magazines with articles on sex are sold out immediately.

Some give advice that would certainly be challenged in the West. Two years ago the magazine *Health* said intercourse should ideally last two minutes. It also said women were less interested in sex than men, and that sex before marriage could harm a girl's chances of finding a husband, and in a man "can cause fluctuations of potency and even neurotic reactions."

As official prudishness gives way slowly to a more realistic public outlook on life, and as the problems of a falling birth-rate and a high divorce rate become more acute, so more and more Soviet doctors and sociologists are finding room in Soviet publications to call for a change in attitude.

Telecommunications in the Arab world

The growing political and economic importance of the Arab world, together with its huge oil wealth, has brought about a rapid expansion of telecommunications networks there. This Special Report examines this growth and the opportunities it offers

Market with a great hunger

by Derek Harris

The first telex system fully adapted for Arabic was inaugurated this summer with machines in the United States, Japan and Kuwait shipping right to left to spill out messages in the flowing Arabic script.

It was an interesting enough event technologically, the achievement of the Kuwait Institute for Scientific Research in co-operation with the United States-based Technology International Corporation. There was a telex previously adapted to Arabic but this produced distinctly inelegant translations, sometimes not easily followed. The Kuwait Institute solved that by coming up with a computer-decoder.

But the event was perhaps more important as a symbol. Arab nations, even where in some cases there has been a decade or more of intense development, still display the most omnivorous demand that exists in the world today for all the various means of telecommunication, from telephone and telex to radio wave links and satellite communications.

It is the next logical step for them to want systems more closely adapted to their own needs, as with the projected pan-Arab telecommunications satellite. Those dependent on Arabic as a language have long suffered difficulties in interacting particularly with technologies based on the distinctly different languages of the Greco-Roman world.

But the symbolism of the Kuwaiti venture goes further in that the new system will also readily transmit messages in the English, Greek or Roman alphabets. The Arabs have no illusions about having to live with the rest of the world and are still turning to the in-

dustrialized countries to help them within little more than a generation to bridge the development gaps which elsewhere it has taken centuries to cross.

The Arab nations' annual growth rates for international telecommunications services alone, of 77 per cent for telephoning and 36 per cent for telexing time, were noted in a recent survey by Cable & Wireless, the United Kingdom company which operates extensively in the Middle East. Even the demand for telex messages—a declining sector in most of the rest of the world—was up 6 per cent last year compared with 1976.

Few businesses operate at such sustained high growth rates. But the reasons for growth are clear enough. If it is impossible to communicate quickly, whether from office to office in the same city or across the globe, it makes the modern style of trading equally impossible. But in the era of Middle East oil riches, the Arab world is willy-nilly already playing a major role in world trade and that process is accelerating.

That good communications are vital in such development has been shown by the experience of Bahrain where so many international companies have made their headquarters and particularly major world banks. Since the demise of troubled Beirut as the financial centre of the Arab world, Bahrain has come closest to filling the role and the quality of its communications facilities has been crucial to such development.

Some businessmen headquartered in Saudi Arabia have had so much difficulty in some parts of that country in getting out international telephone calls ready that flying into Bahrain has been a popular way of coping with the problem.

The biggest contract in the history of the telephone network signed earlier this year should solve those problems in Saudi Arabia and other major improvements are planned for telecommunications there.

The Saudis were early exploiters of the satellite communication network offered internationally by Intelstat and now used by most Arab countries. A French consortium, backed by the French Government, is to provide a colour television network for the whole of Saudi Arabia, half of whose population is nomadic.

Egypt's decayed communications system, now about to be tackled with a two-stage development plan even bigger than that in Saudi Arabia, has fettered Egypt's development as a business centre. Businessmen have even had to resort to setting up offices in ships to try to overcome the communications problems, the ships providing radio links with their home offices.

If Egypt can increase its present 400,000 telephone lines up to one million by 1984 as planned—with five million lines as the target for the end of the century—it will stand some chance of fulfilling its natural role as a major financial centre of the Arab world.

Its development as a natural industrial heartland for the Middle East also depends a great deal on the speed with which the communications problems are solved, not easy in a system started as far back as 1929 that is now hopelessly outdated, with its telex system grossly overburdened.

One of the keystones of the growing power in both Middle East and world financial markets of Kuwait is that its telecommunications are almost on a par with those of Bahrain, Ku-

wait plays a key role in both the international money markets—its domestic bond market is already growing substantially—and in channeling funds in and out of the major international stock exchanges.

In addition to these trading pressures that are demanding a rapid upgrading of telecommunications among the Arab nations, there are other compelling reasons for growth in the sector. Defence demands on telecommunications by any Middle East country are necessarily great as well as complex.

The Arab nations also need to look to radio and television communications to make a big contribution to solving the problem of educational standards. The adult population of the 125 million or so Arabs is still not far short of being 70 per cent illiterate, with the nomadic way of life followed by many as an added complication. There are many scattered communities away from main centres of population with their burgeoning academic institutions and other training facilities.

Educational and information services can reach such previously isolated communities, given the introduction of the modern telecommunications facilities like broadband microwave terrestrial and space systems and the land-line coaxial cables. Land-based microwave systems have the advantage of large capacity which is of particular benefit when television services are introduced, since one television channel occupies the equivalent of nearly 1,000 telephone circuits.

There is the snag that terrestrial systems are "line of sight", which means each transmitter has to "see" the next one in the chain, resulting in a disproportionate cost when servicing

scattered communities. But it is a cost the Arabs will have to face if traditionally backward communities are to be rapidly transformed into part of an industrialized society.

There is an equally strong pan-Arab political dynamic. This is what the ArabSat regional satellite scheme is all about. ArabSat was formed early last year, within the framework of the Arab League and taking in 21 Arab countries.

It was aimed at setting up a regional communications satellite devoted to meeting the needs of the Arab world. It was seen as a key factor in raising social, economic and educational standards throughout the Arab world and as a means of promoting greater unity.

The Arab Satellite Communication Organization, to give it its full title, is now based in Riyadh in Saudi Arabia, a country which is expected to contribute a major share towards the cost of around \$150m. Consultants are already working on a traffic survey but it looks likely that the project will not be operational before 1980.

One question which has yet to be resolved is how far the various Arab countries, in contemplating the use of the ArabSat satellite, will be influenced by cost factors. There is already wide use of the Intelstat satellites, mainly the one tracking over the Indian Ocean, although some Arab countries are also using the Atlantic satellite system with its ability to allow direct communication with the Americas.

Intelstat might prove a cheaper proposition than ArabSat's satellite system although ArabSat will have the advantage of being entirely dedicated to Arab needs. Because the ArabSat project has not moved on as quickly as first planned,

other transnational communication systems for the Arab nations have been discussed, including one backed by the Kuwaitis for laying submarine cables in The Gulf to serve states bordering on that waterway.

What seems likely to precede that is a cable linking Bahrain, Qatar and the United Arab Emirates on which preliminary development work has started. Telephone and telex traffic between these three states has grown substantially, but that is not the only argument for ceasing to rely on the satellite connections, in which so many Arab countries have turned to solve their initial difficulties in providing expanded telecommunications quickly.

Unless something is done to increase telecommunications capacity there could be problems for a number of states by 1980 when it looks likely that Intelstat capacity on the Indian Ocean link will have largely been taken up.

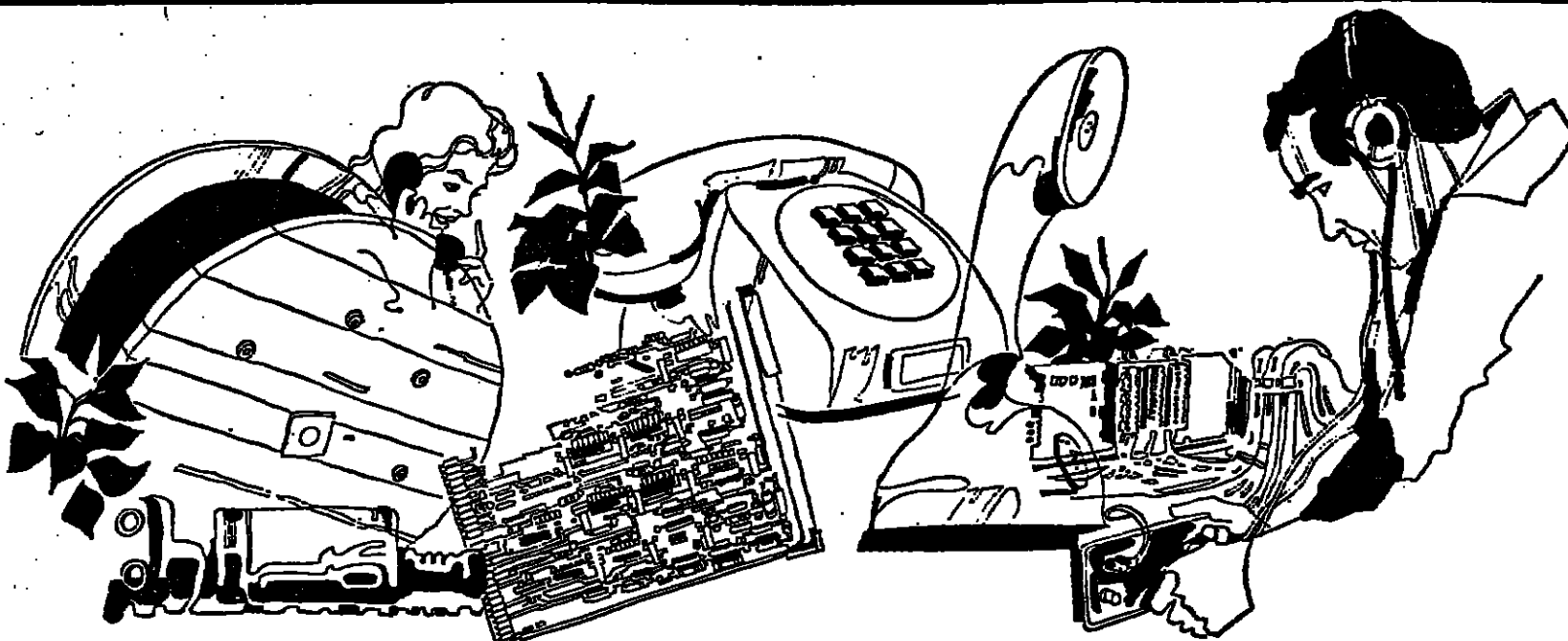
Most of the Gulf states, for instance, are out of the line of coverage of the Atlantic satellite system which means that additional antennae have to be installed to make use of the Atlantic link. But Bahrain, which already has an antenna working to the Indian Ocean satellite, should by early 1980 have an additional dish beamed on to the Atlantic system—an insurance which other states may well take out soon.

There is another factor which throws the focus back to improving terrestrial facilities such as with the cables. For short-distance communications these are a much cheaper proposition than the satellite channels although the space systems have a cost advantage for worldwide communication.

The author is Commercial Editor, The Times.



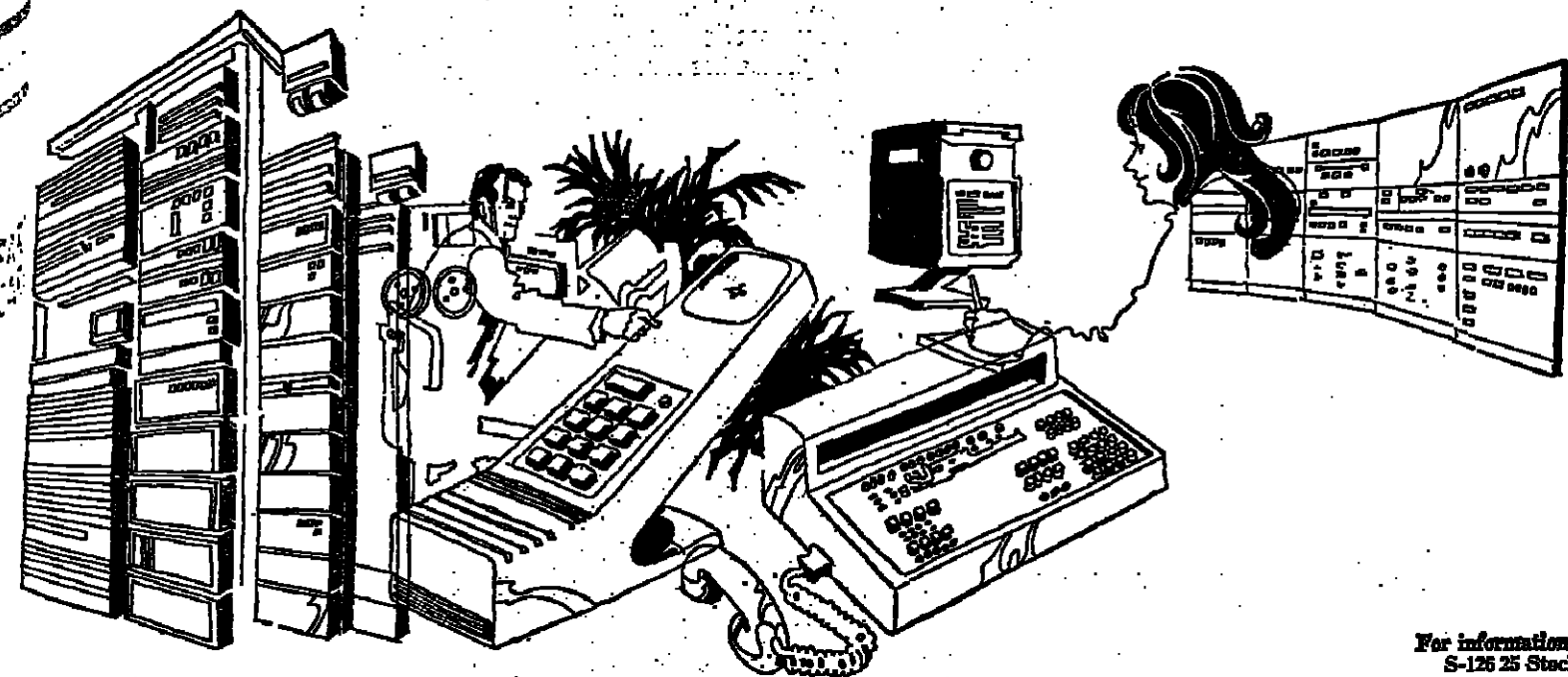
Telecommunications carry an ancient message. A shaikh reading from the Koran in a broadcasting studio in Saudi Arabia.



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Hundreds of millions yet to be spent

by Derek Harris

Arab spending on telecommunications is already high. Most nations have at least one earth satellite antenna to plug into the space networks and more coaxial cables are going in to link various countries. Some Gulf countries have also made big strides in providing internal telephone and telex services capable of meeting the sharply rising demands of trade.

But the hundreds of millions of pounds still to be spent on plans now on the drawing boards make the Arab nations the biggest single market world wide for telecommunications equipment and technology.

The scale of investment is shown by Saudi Arabia's \$1,500m contract signed earlier this year with Philips, the Dutch company, L. M. Ericsson of Sweden and Bell Canada. There are more than 200,000 telephones already connected in Saudi Arabia but its exchanges are overburdened and not always reliable.

About 400,000 new push-button telephones will probably be installed in offices and homes within three years, with perhaps 2,000 new public call-boxes in addition. But that is only part of an ambitious Saudi masterplan to improve all its telecommunications. A nationwide microwave link is being built and coaxial cable links with adjoining Arab states are growing.

Another large and important contract for which the world's major telecommunications companies are now bidding is for the modernization and extension of Egypt's telephone network, more than 40 years old. The first phase, over five years, is worth \$320m and a longer-term plan involves spending an additional \$5,100m, altogether nearly four times the cost of the Saudi scheme.

One of the companies bidding for the contracts is the

multinational company IIT, based in the United States, with a substantial involvement for its subsidiary in the United Kingdom, SIT, a leader in the manufacture of telephone cable.

At least three European companies, Siemens of West Germany, CIT-Alcatel of France and Philips of Holland, are also in the running. Part of the project is for a plant to make fully electronic telephone exchanges controlled by computers not only for the Egyptian but for other Middle East markets.

It is not known whether or not Philips will bid jointly with L. M. Ericsson of Sweden, but the size of the project is so great that it appears likely that a consortium will eventually get the contract.

Even where countries have efficient telephone and telex facilities further spending is planned. Bahrain had three telephone operators and no numbers at the close of the Second World War—subscribers were asked for by name—but by last year nearly 20,000 lines were available with 58,000 the expected total under an existing expansion plan.

Bahrain also has the advantage of being compact compared with some Arab states with their wide scattering of isolated communities. Nevertheless, according to Cable & Wireless, the British consultancy and operating company which has been involved in Bahrain's telecommunications development from the beginning, more than £140m will need to be invested by 1982 if the high standards of service there are to be maintained. That is at 1977 prices so that the actual cost will eventually be greater.

The latest returns by the American Telephone and Telegraph Company on the number of telephones available shows the extent to which Arab states will have

to go in fully equipping themselves with modern telecommunications.

The basis of the survey is the number of telephones for every 100 of the population. The United States figure is a little below 70 and the United Kingdom stands at 38.

In the Arab world anything in double figures is an achievement with the high penetration largely found in states bordering the east coast of the Arabian peninsula. Dubai, for instance, had 13.3 telephones per 100 of the population last year, Kuwait had 13, Qatar 12.8 and Bahrain 11.6. But Saudi Arabia had only 2.1 and Iraq 2.8. Oman had only one telephone for every 200 of its population.

One of the difficulties for a number of Arab countries is that while they have excellent international communication links by satellite or by terrestrial systems, the quality of the signals can deteriorate quickly when they enter the domestic network. Such internal networks are often of limited penetration. That means that while it may be possible to get crystal clear calls between the international terminals, the calls between important cities in a particular country can be unsatisfactory.

Such difficulties mean that many Arab states will provide an exceptional market for telecommunications equipment well into the next decade.

Typical of the demand thrown up by a country whose economy is growing quickly is Qatar which in 1963 had an exchange at Doha with only 100 telephone lines, rising to about 7,000 lines in the middle 1960s.

Three transportable cross-bar exchanges were introduced in 1971 to add initially about 3,000 lines so that within four years the total network had about 13,000 lines.

Since then the number of

lines has nearly doubled, though most of the lines and handsets are still concentrated around Doha with the rest of the country linked by a combination of land lines and radio circuits.

Until 1976 Qatar was linked to the rest of the world by a tropospheric scatter connection with Bahrain from where calls were beamed out on the Bahrain satellite station but now Qatar has its own earth station.

Satellite earth stations alone cost several million pounds each but the scheme for a new satellite system dedicated entirely to Arab needs, now being worked on by the Arab Satellite Communication Organization (Arabsat), will cost considerably more than the £500m which will be spent direct by Arabsat.

Individual countries will not only have to provide the earth stations for use with the satellite but considerable ancillary communications. Such basic services will include control centres and switching centres, with other special facilities needed to create links with existing telecommunications systems.

It is not only the wealthy countries with oil which are responsible for the size of the Arab telecommunications market. Agricultural development of Sudan, heavily funded by Saudi Arabia and Kuwait, has produced unusual demands on telecommunications.

An irrigation and farming scheme, involving more than £2,000m in Saudi money and Egyptian manpower and skill, includes a system of controlling sluice gates with remote-control telemetry.

Sudan is also an example of the larger country with difficulties in providing adequate telephone services and work on a national microwave network has started to remedy the position.

The telecommunications market not only concerns consultancy contracts of which the United Kingdom Post Office is getting an increasing share—but contracts for supplying the equipment. Arab countries are also short of experienced engineers and technicians needed to operate and maintain systems after they are installed.

It is now common for the management of telecommunications systems to be offered for commercial contract, and there is also a market opportunity in helping the Arab administrations to set up courses, including the provision of teachers, to increase the domestic supply of technicians who can eventually take over operation and maintenance in telecommunications.

Cable & Wireless, which has consultancy and operational contracts in about 70 countries and has an historical connection with many Middle East countries, even has its own regional engineering college in Bahrain.

Initial training lasts 20 months followed by 18 months to four years in a sector of particular responsibility such as radio or line transmission. The student can then take an advanced course at the company's engineering college in Cornwall.

The British Post Office has so far been involved principally in Libya, landing its first £11.5m contract as design consultant for a high-capacity submerged cable between Tripoli and Benghazi.

British skill in that area, as well as the companies like SIT producing cables and GEC and Plessey in producing transmission equipment and telephone instruments, should ensure that the United Kingdom gets a share of the booming Arab telecommunications market.

The author is Commercial Editor, The Times.

SATELLITES

Arabsat station planned for exclusive use

by Pearce Wright

A second chain of earth stations and associated broadcasting equipment costing more than £100m will be needed by the Arab countries for the next stage of their plan for developing satellite communications. The new installations will be a special telecommunications network using Arabsat, a satellite to be launched for the League of Arab States for their exclusive purposes.

As far as the technical aspects of designing the ground stations and important items of apparatus are concerned, there are no large difficulties to be resolved.

The main task for the Arab States organization, which shares its technical and administrative work between offices in Cairo and Riyadh, lies outside the technologies of space communications. They come in the development of the national telecommunications systems to ensure that telephone and broadcasting information can be relayed between the earth stations and towns and villages.

Many of the Middle East countries have become expert in the use of satellite communication links for transmitting business data and diplomatic messages. Indeed if a case study was needed to demonstrate the political importance of comsats (communications satellites), then the role they have played in providing an information bridge between the Middle East and the West would make a classic example.

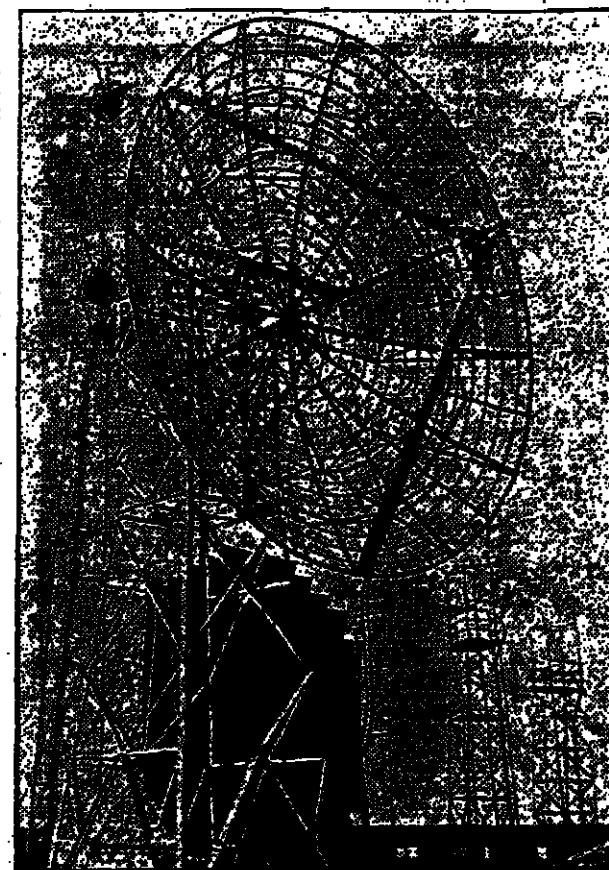
The introduction of earth stations in places like Bahrain, Qatar, Abu Dhabi, Dubai, Oman, Kuwait, Saudi Arabia, Egypt and Sudan has not been a question of acquiring a status symbol comparable with the attitude towards having a national airline.

The primary role has been to put diplomats at the United Nations or those negotiating at conference tables in London, Paris, Bonn, Geneva or elsewhere into rapid contact with their governments. Thus some countries with primitive domestic telephone and broadcasting networks by reports to sports reports and business reports to international telephone and computer-to-computer calls.

An immense volume of data is sent daily via these satellites, from televised royal visits and Camp David reports to sports reports and business reports to international telephone and computer-to-computer calls.

Although this is an enormous success for Intelsat (International Telecommunications Consortium), which is a mixed public-private company, most of the member sovereign states have other ideas about the need to install and control a broadcasting system for the dissemination of news, opinion and educational programmes.

The conflict which has erupted over the past few months in Unesco over the monopoly of news coverage by Western news agencies is part of the same issue. Long before that skirmish of half-baked ideas occurred, the potential use of satellites in the building of underdeveloped countries was being explored in detail.



Dish aerials at the Jebel Camp Tropo telecommunications station, Bahrain, work to Doha. The "billboards" in the background serve Dubai.

More than ten years ago the Arab Telecommunications Union and States Broadcasting began to plan the construction of modern tech to transmit radio and television programmes to Arab capitals, and to tribute educational programmes to remote vi particularly the inacc areas of the Sahara.

This type of satellite free from interference foreign intermediaries communication and operations, was decided years ago.

The Arab States organization network dedicated to political and social. But they have produced most far-reaching schemes the numbers of people served and their geographical spread. Many advantages have come the decade since it took shape, and the available to any user.

Spacecraft can be put to use much longer carry much more broadcast capacity than the generation of comsats type of spacecraft for the 1980s is much complicated than its censors. Several series built on to the spacecraft.

These can be combined with the use of narrow beams, which enable same frequency to be used for transmissions with interference between them. Another trick for being the capacity of a lite has come with a dual called dual polarization. Two messages sent using radio signals identical frequency, they are kept apart phenomenon that is able with that employment polaroid sun glasses.

In the case of the polaroid filter intensity because only waves moving in a direction come through material. The principle be applied to communications systems by deserials to transmit receive only polarized in a certain ion.

Although these universal techniques, cut the costs of satellite terms dramatically—opening their use to nations.

The author is Science Editor, The Times.

telettra

telefonía elettronica e radio spa
Milan-Italy

people want to communicate, telettra provides for it

A MICROWAVE LINK WILL CROSS THE RED SEA WITH A 355 KM HOP.
IT WILL PROVIDE 300 TELEPHONE CHANNELS BETWEEN SAUDI ARABIA AND SUDAN

For the last 25 years the study, design and construction of over-sea microwave links has been one of the strong points of Società Telettra-Italy.

Salient steps in this effort are the Italy Mainland-Sardinia link of 240 km, the France Mainland-Corsica link of 243 km, the Thira-Iraklion link of 128 km in Greece and the Italy-Malta link of 140 km.

Difficulties in over-sea link engineering mainly stem from the peculiar geometry, thus of echo amplitude and delay, which may impair the transmission quality, especially in high-capacity systems.

Overall system economy—location of end stations, tower height, antenna diameter, maintenance cost—may be heavily penalized by vital requirements such as site accessibility and availability of local power supply sources.

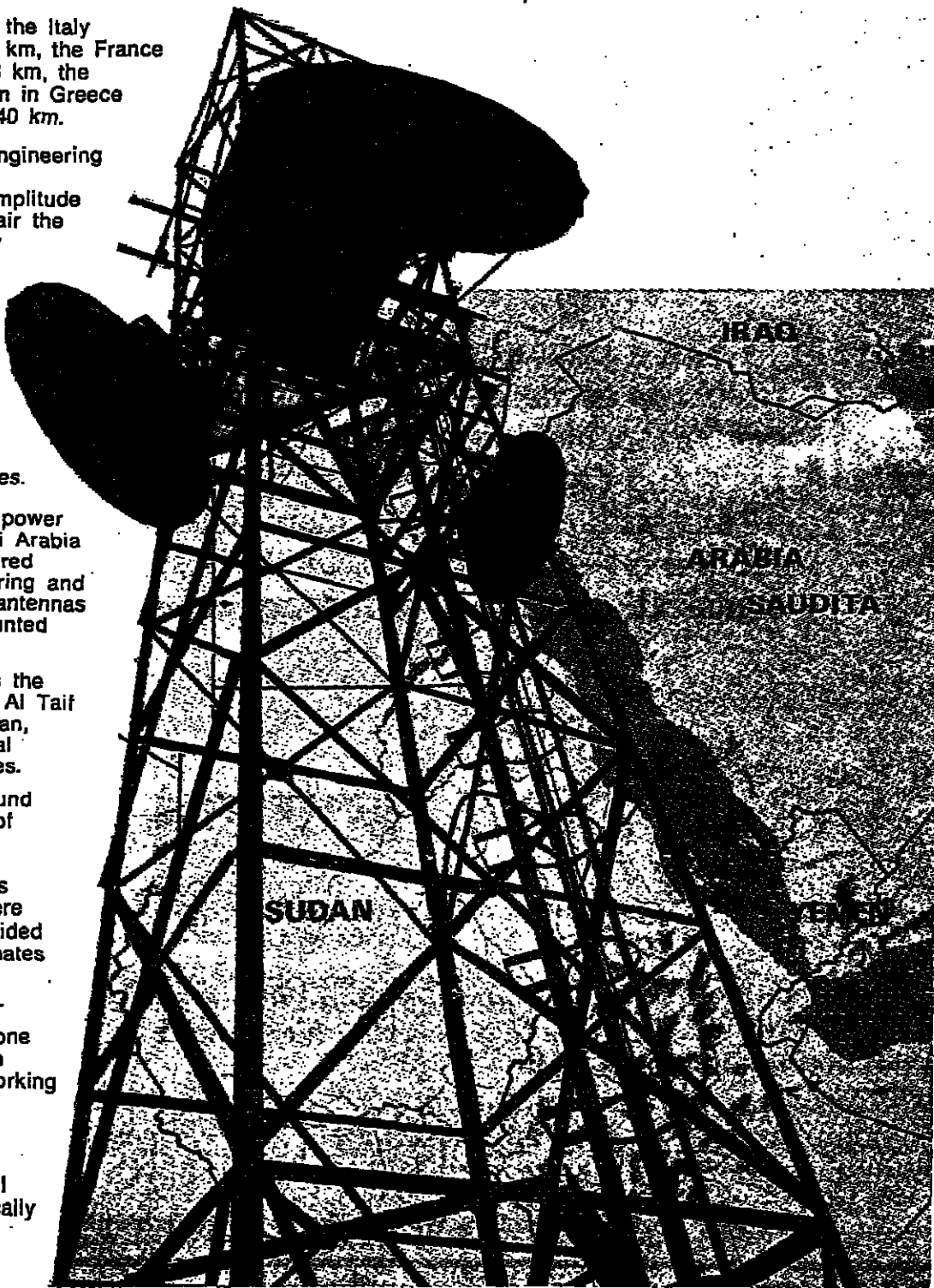
Also the 2 GHz, 10 W output power microwave hop between Saudi Arabia and Sudan, of 355 km required sophisticated system engineering and design approaches, with its antennas of standard dimensions mounted on 90 m high towers.

The international hop crosses the Red Sea at Jebel Dakah near Al Tai and Jebel Erba near Port Sudan, with link tails on the national territory of the two countries.

This choice is based on a sound experience in the mechanics of microwave propagation in non-standard atmospheric conditions. Preliminary surveys conducted under extremely severe environmental conditions provided the exact geographical coordinates for the two end stations on top 2200 m high mountains.

Capacity is two working plus one standby protection beams, with possibility of expansion to six working and one/two protection beams.

Solar cells will power feed the end station microwave equipment. A feature which will simplify installation and drastically reduce maintenance cost.



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The E10 system offers four unique advantages:

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- 4) **Easy maintenance and services:** A Network Management Center serves several exchanges and provides easy maintenance and advanced subscriber services. E10 offers a wide range of software programs and a high rate of return on investments.

E10, digital switching goes in

CIT the People's Choice

TELEPHONES

Good communications will be part of commercial revolution

rise Clark

is to telephone networks what blue is to cookery. It is the crème de la crème of switching networks which will pave the way for office automa-

hardly surprising, that most Arab when reequipping telephone networks, is for digital equip-

communications, both processing, message and word process- be a vital part of stral or commun- brings us back to

digital switching. There are two ways of routing the human voice through a telephone network, using either analogue or digital methods. Basically, analogue methods retain the shape of the human voice. Digital, on the other hand, converts the human voice into bits or pulses.

The advantages of digital over analogue switching are that digital is much faster and more manageable. The network, in terms of equipment, is smaller and can be controlled by computer. It is not surprising that the Arab countries, especially those that have oil dollars to spend on updating their telephone networks, are keen to have digital equipment.

What this means for some European suppliers is that the demand is there, before the equipment has been fully developed. It is a clear case of the market dictating what it wants and the market is a very lucrative one. During the past few years almost every Arab country has proposed updating, or at least expanding, its telephone network.

Few European telephone equipment manufacturers though have tried and tested digital switching equipment. Only L. M. Ericsson, of Sweden, CIT Alcatel, of France, and Italtel, of Italy, can really make the claim that they have equipment working.

ensures the more common equipment is SPC (stored programme control) read switched exchanges. These are analogue exchanges which use an hermetically sealed relay which looks like a read (hence the name) to switch and route traffic through the network. The equipment includes processors which can provide various facilities to different subscribers and also control traffic.

Saudi Arabia provides a good example of Arab thinking on telecommunications networks. Last year the kingdom awarded a contract worth £1,500m to a consortium comprising L. M. Ericsson, Philips and Bell (Canada) for the extension of its telephone network. Two other consortia had taken part in bidding, one made up of Western Electric, BICC, Cable & Wireless and Plessey, and the other an ITT-dominated consortium which included the United States company United Utilities. At that time it was the largest telecommunications contract ever awarded.

The contract, scheduled to be completed by the end of 1980, called for the extension of the network by 470,000 lines. On completion Saudi Arabia will have a network of about 670,000 lines, giving a telephone density of more than 10 telephones per 100 inhabitants. This is not very high, perhaps, when considered

against the telephone density of the United Kingdom which is 40 telephones per 100 inhabitants, but certainly higher than Asia, as a whole, with its 2.6 telephones per 100 inhabitants.

In addition to supplying new equipment, the contract included the updating of existing crossbar equipment that L. M. Ericsson had previously installed in Saudi Arabia through the addition of computer control. The contract was split fairly evenly between the three companies. L. M. Ericsson was to provide the digital trunk exchanges, Philips, the rural exchanges which would be PRXSPC read switched exchanges, and Bell (Canada) would be responsible for operation and maintenance for five years.

The first digital equipment has been shipped from L. M. Ericsson and the contract is on schedule. According to Philips, already tens of thousands of lines have been made available but the company has pointed out that it has not been easy, mainly because the work schedule is strict.

In Iraq the Ministry of Communications is understood to be following the Saudi lead in specifying digital equipment for the expansion of its telephone network. The country already has 30 channel PCM (pulse code modulation) transmission equipment and will need switching equipment that is comparable.

The contract for the provision of telephone engineering consultancy services was awarded last August to Cable & Wireless whose brief was to assist the ministry in planning the development of the Iraqi national telephone system and in particular help with the introduction of the latest telephone engineering technologies such as computer-controlled telephone exchanges and solid state digital switching.

In the United Arab Emirates announcements earlier this year suggested that up to £100m could be spent on updating the telephone system. The news followed a board meeting of Emirtel, the UAE's telecommunications agency. Emirtel was born out of a merger of a number of separate telecommunications networks previously operated independently between International Aeradio and Cable & Wireless. International Aeradio and Cable & Wireless together have a 40 per cent interest in the state-controlled company.

It is Emirtel's aim to have 300,000 lines by 1981. The network carries 52,000 lines, but demand is increasing rapidly and the company hopes to have 124,000 lines by the end of this year as a result of last year's spending programme. Equipment has been bought from the Japanese company NEC and from Plessey. However, the contract for the expansion

to 300,000 lines has still to be completed.

By far the most interesting contract still to be completed is the Egyptian. This massive project to update and expand the telephone network could be worth up to £10,000m and stretch over the next 20 years.

The main point about such a contract is the financing arrangements and obviously there can be no call for tenders until financing has been settled. The question is faced with policies, given the present Middle East situation. There is the problem of forming consortia since, generally, even large manufacturers do not have the capability to handle contracts of this size by themselves.

The Arab markets have proved to be big business for telecommunications manufacturers and will continue to be so for some years yet. Once the latest technology in public telephone switching systems has been installed, the next and inevitable step will be into automated office equipment. The flexibility of modern telephone systems will pave the way for new markets in electronic office equipment, always provided, of course, that the Arab world does not decide to manufacture the equipment itself.

The author is communications editor, Electronics Weekly.



An Arab technician working with a Plessey engineer as part of his training to service the PCM transmission equipment installed in Abu Dhabi.

TELEX

Vital key to improvement

me of the vital parts improvement of telecommunications in the Arab particularly when are in their first economic expansion, there is then an increase in telex more so than in the telephones, although ntry's telecommuni- network expands the with ease.

the International Telecommunications Union (ITU) the average annual growth rate for telex traffic in Saudi Arabia to other Arab countries was between 96 per cent and 367 per cent in the period 1972-75 with the prospect of settling down to a 40 per cent growth up to 1980. In traffic to the rest of the world before 1975 the rise was between 164 per cent and 740 per cent annually, the increase to the United King-

dom being 297 per cent. But the rise to these non-Arab destinations was expected to moderate up to 1980.

The ITU analysis shows that telex subscribers in Saudi Arabia increased from 65 in 1973 to 560 in 1976. In 1972 telex was used for 216 minutes a day but by 1975 this had multiplied by more than 25 times to 5,926 minutes a day.

The forecast for subscriber

lines in Saudi Arabia is 10,000 in 1980, rising to 18,000 five years later and to 30,000 in 1990. Projected expansion elsewhere is also considerable, although obviously not on the scale of such an oil-rich country as Saudi Arabia.

Both Bahrain and Kuwait have well established facilities. Even so, use of telex in Bahrain and other Arab countries up to 1980 is expected to rise by between 30

per cent and 40 per cent a year, and by 25 to 35 per cent to non-Arab destinations.

Kuwait is expected to show a 30 per cent to 40 per cent annual growth in traffic with other Arab countries, and about 25 per cent to the industrialized nations. Traffic between Kuwait and the United Kingdom rose 42 per cent annually between 1971 and 1975.

When telex demand settles down in this way there is

still the factor of which service best suits the needs of the business community. Major trading deals at a distance are obviously best done by telephone, with the facility it gives for personal contact. But telex is often the answer in dealing with details that arise in fulfilling contracts.

While Arab countries at first have to install telex links as quickly as possible — usually taking telex circuits on space satellite links — a different problem faces those countries like Egypt that need to modernize old-fashioned systems.

Businessmen in Cairo are usually as caustic about the telex facilities there as about the poor telephone service. A consultant survey, carried out as part of the preparatory work for improving Egypt's telecommunications, showed that the Cairo telex exchange had nevertheless been providing automatic direct international trunking to Rome, London, Geneva, Frankfurt, Paris, Vienna, Tokyo, Athens and Saudi Arabia, as well as international telegraph networks.

The Cairo telex has two local 400 subscriber line units. About 70,000 international calls are completed each month on a magnetic tape unit.

The study showed that there were many limiting factors in the telex system, but where the telecommunications system overall is under pressure, customers turn to telex services where they can. This trend may continue in Cairo for several years.

New transmission techniques may ease the burden of meeting the growth in telex traffic, according to the study. Until recently the main transmission media available for long-distance use were carrier frequency cable and radio relay systems. Both these systems have been developed to offer efficiency and reliability. Cable and radio transmission systems are also being used for international communications.

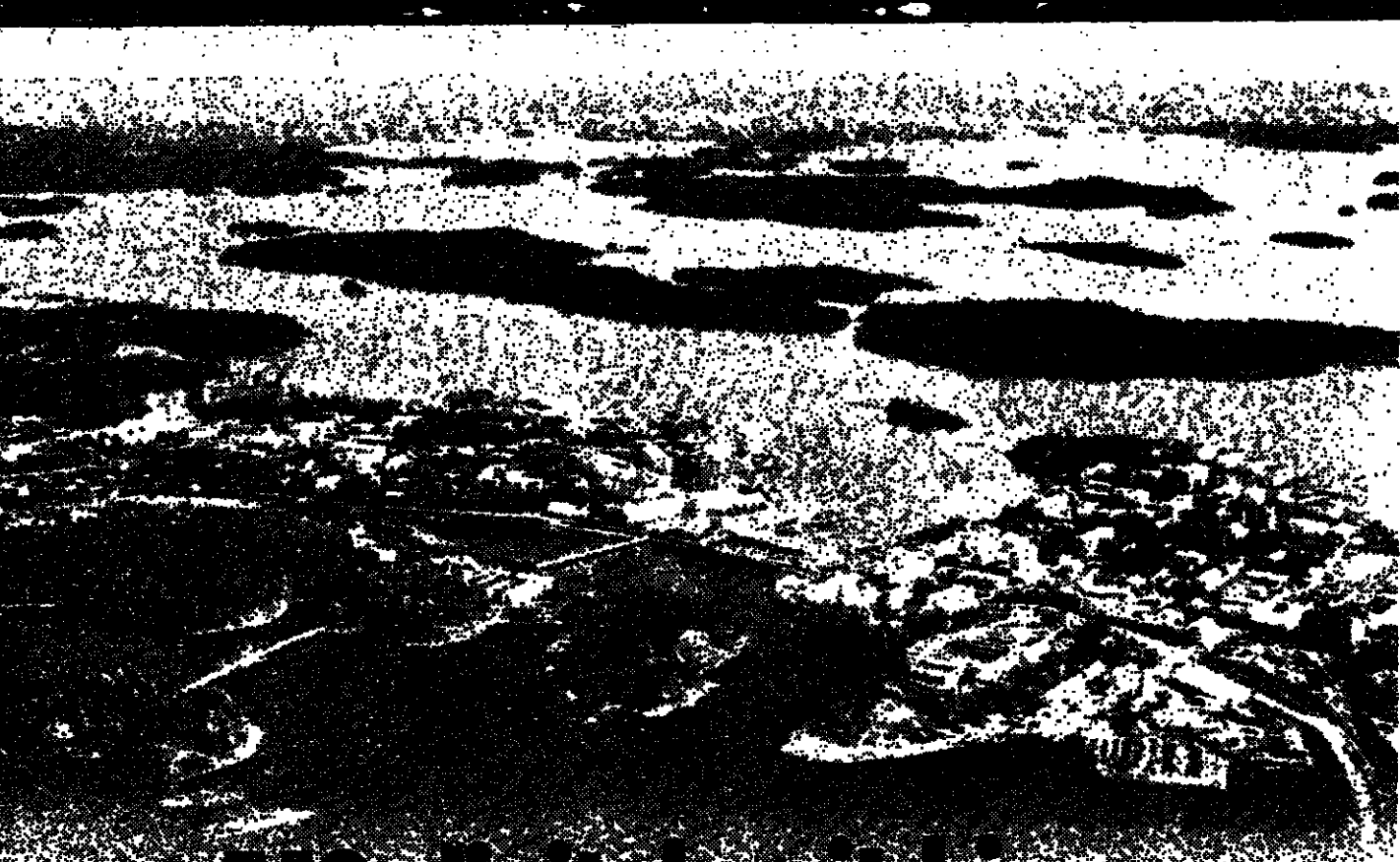
But further development of satellite and submarine cable systems will increase the number of channels per system, thus reducing the costs per circuit.

There is an advantage in employing telex in present transmission systems and those which are being planned. One telephone channel can be split up into 24 telex channels. On the other hand, it takes 900 telephone channels to give the capacity for a single television broadcasting channel.

Research is going on into new transmission media such as waveguides and optical fibres. It seems likely the consultants say that lower cost broadband transmission facilities will be available soon.

As the ITU points out, what could affect the growth is a swing away by some subscribers from the simple keyboard teletype type keyboards used in telex even though there have been adaptations to Arab needs so that messages can be sent in Arab script. Terminals such as visual display units, colour television screens, could be increasingly in demand, with special storage and data processing capabilities.

D.H.



E10, digital switching goes long distance in Finland.

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TELEVISION AND RADIO

Powerful transmitters are symbols of national status

by Frank Ogden

When the British left the Gulf during the 1960s, they left a string of independent states, each seeking a national identity. Because of the oil revenues, there was no shortage of money. Thus the first purchases concerned a chain of radio broadcasting stations to propagate the national voice. For the Arabs who controlled the stations, these proved a distinctly useful diplomatic tool, made even more effective by having a common language in Gulf Arabic, as distinct from the purist Egyptian form. Each country listened to the broadcasts of its neighbours and in no small way the radio chain contributed to the creation of the UAE as a viable commonwealth.

The vast increase in dollar oil revenues, which followed the oil crisis of 1973 proved to be something

of a watershed in broadcast equipment, just as it did in many other capital investment areas. A first world money supply, coupled with a Third World attitude, produced a broadcast network around the Gulf which was bizarre in its sheer power, to say the least. Countries with an indigenous population smaller than Birmingham and a land area the size of Wales bought a series of 11 megawatt medium-wave transmitters from one of the leading United Kingdom equipment companies.

Dubai recently spent £5.5m on such a transmitter, following in the footsteps of Abu Dhabi, Qatar and Kuwait. These radio stations are more powerful than any of the broadcast installations in the United Kingdom.

Even if one accepts that these transmitters are intended to provide an external service—which is not the

declared intention of the countries involved—they are still 10 times more powerful than required. The truth is that the Arabs within the UAE have drawn a simple equation—transmitter power and national status—which oil funds have been able to realize. This series of contracts probably earned Britain more than £25m.

The Middle East now presents the chance for prospectors in petrodollars that it did five years ago. This particularly applies to the large, turnkey systems business in the broadcast market and has hit no one harder than the British.

Once upon a time about half a dozen British companies had the entire Middle East—with the notable exception of Saudi Arabia which has always been and continues to be dominated by the French—stitched up tightly when it came to supplying broadcast equipment.

The first stations were left by the British Army, and when these were replaced the government consultants were nearly all from the BBC. The Egyptian, Yemeni and other broadcasting organizations had little expertise on their own.

Naturally, the men from the BBC specified the type of equipment they were used to working with and thus the contracts rolled in for companies such as Marconi and Pye.

The situation is now changing, partly through world marketing pressures and partly through increasing technical competence within the Arab broadcasting organizations. Ironically, the mechanism by which the Arabs became aware of competitive technology was contained within the original equipment supply contracts. Whatever else may be said, the Arabs have always realized the immense value of

education and included technical training clauses into supply contracts to create self-reliance.

This policy has paid off with a vengeance. Whereas the Arab countries nearly always used to employ foreign consultants to ensure they got what they wanted, they now use their own Western-trained engineers to do the job. The result is that broadcast equipment contracts tend to be specified very finely and cut right across international barriers.

Names normally associated with consumer products, such as Sony and Toshiba, have started to offer competitive products which the new engineers are happy to buy provided they suit the purpose. Added to this, the Americans have achieved considerable penetration in the straight transmitter sales. One estimate is that nearly

40 companies are competent to tender for the large Middle East contracts where there were only about seven a few years ago.

Even though there are more suppliers in the market for Middle East contracts, the actual business has contracted dramatically over the past two years. As a contracts manager from a British company commented: "Three years ago, the Middle East was everyone's biggest market. When one state had television, all the other states had to have it. All you had to do was to be around at the right time with the right product and you could be fairly sure of selling throughout the Gulf."

This is no longer the case. The oil price has been more or less static for the past three years. Currency earnings in the oil-rich countries, especially Saudi

Arabia, have been building out of oil revenues, have not yet come on stream. The result is a dollar shortage which has been compounded by the vast arms shipments to the Middle East from Western countries.

It is difficult to assess the value of the largest broadcasting contracts because most involve a massive investment in civil as well as electronic engineering. Significantly, one of the last big deals was signed with the French through inter-government contacts at the highest diplomatic levels. Saudi Arabia bought a complete national broadcasting network from the French company Thomson-CSF in a series of deals worth in the region of £200m. The first contracts were signed in 1974 and continued over three years. No business on this scale has appeared since.

To some extent, this reflects the saturation of the Middle East broadcast market. All principal states from Oman to Oman have been equipped with modern radio and television systems. If the East countries were so much political disarray, the individual program capabilities could be worked to create a far more effective, unified Arab casting system along a line to the Arab League project. The taking of such a step would indicate a mature judgment which elude Arab approach to both economic and political development with which to cast. Money and will seem to be lacking at the moment.

The author is broadcast correspondent, *Electronics Weekly*.

DEFENCE

Complete military systems wanted

by Robert Bailey

Military communications is a subject of vital concern to any fighting force, a fact not lost on international companies which are assiduous in their sales efforts in the Arab market as are the sellers of aircraft, missiles and armoured vehicles.

The potential market is huge. There are seven Arab armies with regular staff numbering 50,000 or more. The largest is that of Egypt with standing Armed Forces of 415,000 men and 615,000 reservists, according to the International Institute for Strategic Studies.

While the operational characteristics and needs of these armies in terms of telecommunications tend to be somewhat obscure—both because of military reticence for reasons of security and intense competition to win orders by international electronic companies—a key element in choice of equipment is cost.

It is the emergent oil-rich states that in terms of military inventory have the ability to buy the most modern equipment, with Saudi Arabia and Libya being the most prominent purchasers lately. Political consider-

ations have made the West the main supplier in recent years to Egypt, Morocco, Jordan and Sudan and the Soviet Union the principal source for Algeria, Libya, Syria, Iraq and Yemen.

Whatever the source of supply, military communications falls into two broad categories: tactical and strategic; the former including mobile and portable equipment; the latter being made up of both transportable and fixed equipment.

Most levels of Arab armies have used high frequency and very high frequency manpack transmitters and portable radios for some time. The most recent trend has been a demand for complete military communications systems as in Saudi Arabia.

The possibility of a new deployment and reequipping of the Egyptian Army after a peace agreement may lead to a greater emphasis on mobile strategic communications and on integration of civilian and military networks to protect economic infrastructure.

A standard configuration for a military communications network might comprise a fixed headquarters, a receiving command

centre, a transmitting command centre, various outstations and low-power field stations probably employing closed North African vhf circuits. The command tactical centre would probably communicate over separate links with each outstation with another link to the headquarters.

While simple models can be suggested in terms of some of the Arab armies there has been an obvious imperative in recent years to meet the challenge of one of the most advanced military machines in the world. For those not directly in positions of military confrontation there has been the challenge of forming viable military postures to protect oil wealth. At one end of the scale there are requests for complete turnkey projects, at the other electronic engineers of the United States Company E-Systems are needed to man communications and monitoring stations in Sinai to check movements of the Egyptian and Israeli Armed Forces.

For all there is a bewildering array of equipment on offer. Many companies have been active for many years. Rascal Taccom announced this year that sales of its Clansman vhf

radio communications equipment had reached \$100m with one order to an undisclosed Arab country worth £13m. At the 1978 British Army Equipment Exhibition the company said it had received overseas sales totalling £10m for a new generation of military manpack receivers with linear and digital integrated circuits and using electronic thick film techniques which were said to be half the size and weight of similar equipments in service.

The Plessey Company's avionics and communications division has recently announced a vhf/fm relay manpack receiver transmitter that it says can replace manned units which link soldiers unable to communicate on vhf because of terrain difficulties. Called Groundsat, the equipment automatically retransmits signals on the same frequency as that on which they are received.

Arab military procurement agencies are never far from company minds. The French group, Thomson-CSF, this year took advantage of a scientific expedition across the Sahara to conduct tests of vhf/fm

transceivers. The company has also started production of a new range of transmitters operating in the 26-76MHz band intended for short range tactical links with optional remote control and digital encoding of speech.

One of the biggest developments in battlefield radio that will have general significance is the next generation called Singars that will be supplied to the United States Army. This is being developed by ITT in collaboration with Cincinnati Electronics and Marconi Space and Defence Systems and will be designed to change, or in technical jargon hop, frequencies faster than other types of radio.

There are other developments in military communications that must also interest those armies that demand the most advanced equipment available. The United States, has displayed a television camera with a lens the size of an overcoat button capable of being fired from an artillery shell and transmitting pictures clearly at starlight level at 2,000 feet and still be reusable.

While military communications products are continually being developed

there is a growing trend in Arab military attitudes to demand a contribution to the establishment of indigenous manufacturing industries.

In collaboration with the Egyptian Ministry of Defence and War Production the Plessey company produces vehicle-mounted tactical radio at Benha near Cairo. The Arab Organization for Industrialization controlled by Saudi Arabia, Egypt, Qatar and the United Arab Emirates is establishing an electronics company at Al Kharg in Saudi Arabia to produce Thomson-CSF equipment and the Deca company's doppler radar.

There is likely to be at least one more future major contract involving military equipment. The omnipresent salesmen can at least dwell on the fact that if as promised by President Sadat a comprehensive and detailed plan for developing the Egyptian Armed Forces in all branches exists it is going to be reflected throughout the military hierarchies of the Arab world.

Two of the biggest military communication programmes in monetary terms

have come this year from Saudi Arabia. Litton Industries of the United States, has said agreement in principle has been reached for installation of a command, control and communications system for the whole country. According to Mr John Freitag, head of Litton's data systems division, it is premature to put any emphasis on specific applications but he has said the programme is valued at more than \$1,500m including systems training and maintenance.

On a more definite plane the British state-owned group Cable & Wireless has signed a \$400m contract to act as prime contractor to supply a complete telecommunications system to the Saudi National Guard.

The guard, commanded by Prince Abdullah Bin Abdulaziz, second deputy Prime Minister, is separate from the standing army and comprises 35,000 Bedouin tribesmen organized in 20 regular and semi-regular battalions.

What will be supplied in the Cable & Wireless contract is something of a mystery. A project team led by Walter Hardiman is in Saudi Arabia to implement the con-

tract that has taken years to complete. It has been speculated that the equipment will include fixed, mobile radio and surveillance equipment.

The British Ministry of Defence is to progress the contract which does not, it is stood, offer a training modernization contract. The National Guard is the Vinnell Corporation of the United States.

Whatever industrial states do, integrative military communications between the Arab Organization for Industrialization constituent countries is a future trend.

Arab states are to the oil supplies of the world there will need to be accommodation of telecommunications not possibly involving as well as tactical requirements. The more rapid change in the Arab armaments' equipment structures' representatives is no doubt that the will face challenging demands.

The author is on the Middle East Economics Digest.

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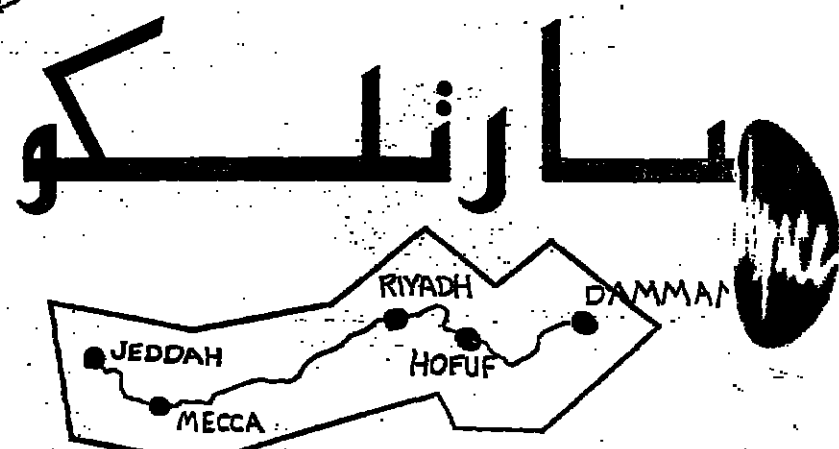
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AVIATION

British experts help to bring in satellite era

ir Reed

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Arab-world air- erate joint ser-



Air traffic control carried out at Doha international airport, Qatar, by staff of International Aeradio.

vices out of the area across the North Atlantic.

It is possible to foresee a future joint reservations and communications network for the Arab world emerging from such an agreement. This would be operated independently of any of the European airlines but, for reasons outlined above, would be linked in with the industry system.

Saudia is one of the airlines in the area which is using satellites to relay its messages halfway across the world. Some of the other carriers rely on more traditional methods of communication, but once again the trend is towards a joint area scheme using the very latest electronic developments.

With the revenues from oil, the heavy cost of such schemes is no barrier to their implementation. The limiting factor to expansion in this highly advanced area is finding sufficient trained people both to install the equipment and to teach local workers how to install it and maintain it.

This is where British companies such as International

Aeradio, the British Airways subsidiary, and Airwork have, over the years, done such an excellent job. IAL, for instance, runs courses for the training of air traffic controllers, and controllers at airports as diverse as Jeddah and Doha, Sharjah and Muscat have learnt their job in the IAL "school" just outside the boundary of Heathrow airport, London.

IAL has also installed at many airports in the Middle East its Rapidex security system which automatically vets passengers and their

luggage before they board aircraft, and the computerized information systems which make catching the right aircraft from the correct departure gate slightly less of a hazard than it used to be.

Many of the airports in the area which, a few years ago, were little more than landing strips in the desert have been updated to international standards with 10,000ft runways, and the radars and radio communications which must go with such facilities to ensure

high standards of safety have been or are being put in.

In the military sector, electronics are playing a big part in the modernization of both air and ground facilities, and once again specialists European companies are well entrenched in the area.

British Aerospace, the nationalized aircraft manufacturer, and a number of British electronics and associated companies, are involved in a massive contract with the Government of Saudi Arabia to oversee the

expansion of the Saudi Air Force. The contract covers a wide range of activities, from establishing advanced communications to the setting up of schools.

A similar, although much smaller defence support contract is being carried out by British Aerospace in Oman, and it and many other international companies are seeking further deals in what continues to be an extremely fertile market.

The author is Air Correspondent, The Times.

MARINE

Vigorous selling offshore

by William Maconachie

A contract worth at least £500,000 just signed by Marconi Communication Systems with Dubai National Gas to supply tropospheric scatter and line-of-sight microwave radio links for communication between the Jebel Ali gas plant on the mainland and the Fateh production platform in the Gulf is one more order for British electronics by Middle East maritime and offshore customers. A great deal of vigorous selling has been going on to willing buyers.

This latest offshore link will be the fourth supplied there by this member of the GEC-Marconi group, the other three being already in operation between Abu Dhabi and Das Island, Bahrain and Dubai, and Bahrain and Doha.

Ferranti, too, has been helped in its climb out of the red by orders for offshore links in this area. It was the first to install a computer offshore when it supplied the duplicated telemetry system which monitors and controls oil production from each of the wells in the Umm Shaif field off Abu Dhabi.

Oil and gas production offshore brings in its train construction of installations and accommodation on shore. This leads to more non-tanker shipping to bring in materials and stores, which in turn calls for more and better port facilities. Up and down both the Gulf and Red Sea coasts ambitious port complexes are scheduled, under way, or being completed. These include facilities for container traffic.

While much reliance on European and other flag shipping is still necessary, shipping under Middle East ownership is being expanded and modernized to match the ports it will use. Both harbours and ships have been a ready market for British marine electronics manufacturers, who often not only supply the equipment but also fit and commission the finished installations, and train local engineers to operate and maintain them.

In radar Decca have been particularly successful, providing harbour surveillance and guidance radar for the Saudi port of Ras al Juymah, and shipborne radars, autopilots and navigators for vessels from fishing craft upwards, including dry-cargo and roll-on, roll-off ships and perhaps the most luxurious yacht ever built, the Al Riyadh, recently delivered by Dutch builders to King Khalid of Saudi Arabia.

Decca Navigator's position-fixing aid system, in wide use by Gulf shipping, is being extended by the contract with the Ports and Shipping Organization

of Iran's Ministry of Roads and Transport to establish a new chain to cover the strait of Hormuz at the entrance to the Gulf. Although this is an Iranian project it will link with the more south-easterly of the two Middle East navigation service chains.

An interesting feature of Middle East shipping expansion has been the formation of consortiums to operate fleets jointly owned by several states. Typical of these are Arab Maritime Transportation operated by Oman, Bahrain and Saudi Arabia, all of whose ships have been fitted out with full communications stations and navigational aids by Rediffon, Telecommunications, and United Arab Shipping, built on what was formerly Kuwait Shipping, which has been filling page after page of Marconi Marine's order book for communication and navigation equipment. Twenty of this company's ships have been built at the Govan shipyard and another 38 have been ordered from Hyundai in Korea of which only four remain to be completed.

Marconi Marine has also recently completed a whf harbour communications system for the Iraqi Ports Administration, and supplied whf and medium frequency radiotelephones and other equipment for many individual vessels.

Rediffon, for its part, has also fitted main communication radio stations in five Iraqi cargo ships recently delivered from Japanese yards, and have supplied the radio communication and navigation aids for the Iraqi cadet training ship Ibn Khaldoun, which also has a radar training simulator provided by the sister company Rediffon Simulation, of Crawley.

Another British firm prominent in marine electronics, Kelvin Hughes, while not holding up any single Middle East plum, says that it has been getting a steady flow of orders for radars, echo sounders and sonars, and radio-telephone sets for individual vessels.

All the business in this market is not in the hands of the big firms. Electronic Laboratories, of Poole, may be fairly small, but it too has been scoring quietly in the Middle East, particularly with small craft radars for fast patrol boats operated by police and customs in several Gulf states. These radars are also popular for coasters, harbour craft and fishing vessels.

Dry-cargo vessels are appearing in greater numbers among the tankers which at one time were almost the only ocean-going ships in the Gulf, and the proportion of these owned and operated by the Arab states will continue to rise. Hard though this may be on European (including British), Japanese, American and other flag shipowners who have been carrying cargoes to the region, every new Arab-owned ship is a potential customer for marine electronics of British origin.

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The use of telecommunications in the Arab world has not developed everywhere at the same rate. Alan Mackie looks at Egypt, a country with more telecommunications problems than most, and John Whelan looks at the situation in The Gulf, one of the most advanced regions

Cairo calls up the engineers

When Mr Hamdoun Salem, then Prime Minister, opened a new earth satellite station near Cairo, he dialled Egypt's embassies in Paris and Washington in seconds to demonstrate its effectiveness. "And what about Heliopolis?", one of the by-standers quipped. The remark went into the daily newspapers.

Telephone contact between Heliopolis and the centre of Cairo—a distance of five miles—has been all but impossible for months, and in many parts of the city, including the centre, the telephone service has almost broken down.

The Government has been spurred into action, and there should be some improvement—at least in the centre of the city—when a new cable and switch system laid by AEG-Telefunken, of West Germany, and Egyptian engineers is in operation. The 6,000-line cable will almost double present capacity. At the same time Raytheon, of the United States, is setting up a \$10m digital microwave system which will be linked to Cairo's 16 exchanges, allowing 18,000 simultaneous conversations.

Other contracts have been made with United Kingdom

companies (Standard Telephone and Cables is one), Japanese and French companies for equipment. But up to now it has all been piecemeal and a stop-gap operation. Work on a more far-reaching system will begin in earnest on the basis of a study, which cost \$5.3m, by the United States group Continental Telephone International.

Continental estimated that it would take about \$5,000m to provide Cairo with an adequate telephone system. It would be operational within five years and would install 655,000 new lines in place of worn-out parts in

the existing 350,000 lines. The potential demand in Egypt is so great that between four million and five million lines could be in use by the end of the century.

Continental recommended that the contract should be awarded to a consortium so that equipment could be standardized as far as possible. A lack of standardization is a handicap in present improvement schemes. The Egyptian Government is reported to have accepted these recommendations.

A number of United States companies have

already formed a consortium. Continental Telephone Corporation (CTC) has joined Western Electric and General Telephone and Electronics Corporation (GTEC) and engaged Morgan Stanley, of the United States, to arrange finance. CTC would provide the management and train staff to operate the system, while Western Electric and GTEC would provide equipment. Telex, of Egypt, would be asked to provide most of the non-electric equipment.

Philips, of The Netherlands, and International Telephone and Telegraph,

of the United States, are two other groups interested. Meanwhile, there are two main tasks. The first is to continue with emergency repairs, and try to ensure that they are compatible with the future system. The Egyptian telecommunications organization says that 21,000 more lines will be available in the outskirts of Cairo before the end of this year, besides the new lines being laid in the centre of Cairo. Also, a beginning is being made to supply those who have applied for a telephone.

Only applications up to

1964 have so far been dealt with, although this is likely to improve a great deal soon. Some offices operate with no telephone.

The second task is to raise sufficient finance to give the programme impetus. Here the telephone authorities are having some success. The Egyptian Government recently negotiated a \$40m loan from the Agency for International Development, and the World Bank has also agreed to lend \$35m.

Although most of the effort and finance is to improve Cairo's system, Alex-

andria's telephones are equally lamentable and are also to be overhauled. The newspaper Al-Ahram has described Alexandria as "an isolated city" with worn-out cables in many areas.

The authorities are also trying to improve telephone communications between the governorates. The British company, Telephone Cables, recently won a £2.3m contract to provide a cable linking Suez and Cairo, and later is to supply a lateral cable the length of the north coast to the Libyan border. Aswan will soon be linked to Cairo and Sudan by an earth satellite station.

But Egypt has a

The challenge Government is to incorporate all these projects into a mass and improve maintenance and staff training.

But Egypt has a

Europe's money markets at Gulf brokers' fingertips

That today push-button international dialling would be possible from most Gulf states to Europe would have been difficult to predict even two years ago. The rapid evolution of telecommunications is a factor in the improving environment of all countries in the Gulf except Saudi Arabia and Oman. What looked two years ago like a competition in shahk one-upmanship to build earth satellite stations has resulted in the financial and commercial markets of the Gulf being brought psychologically, as well as practically, closer to the West.

From The Gulf it is now possible to dial direct to Western Europe and Japan as well as to other Gulf states and Iran. The money brokers in a regional centre such as Bahrain, who can casually run up a £500 telephone bill in a day would have been in no position to do this in 1976. For Bahrain the closing of the time gap by improved communications has enabled its enclave of more than 70 banks to bridge the money markets of

Europe and the Far East. When Bahrain Telephones first started as a subsidiary of Cable & Wireless of the United Kingdom just after the Second World War it had three operators and no numbers. The subscribers were asked for by name.

The British firms which have played a big part in planning the network of today are entitled to a certain degree of self-congratulation. The government-owned Cable & Wireless and International Aeradio, a wholly owned subsidiary of British Airways, have both acted in a management role in the UAE and are now minority shareholders in the Emirates Telecommunications Corporation (Emitel), owned 60 per cent by the UAE federal Government and responsible for operating and developing the telephone network of all the former Trucial States—except Ras al Khaimah. The Ras al Khaimah Telecommunications Authority has remained outside Emitel and has a management arrangement with Cable & Wireless.

In Bahrain, Cable & Wire-

less is the owner of the telephone authority though the Government has recently reaffirmed a long-term intention to nationalize the undertaking. The nationalization question is an issue of some sensitivity since it was advocated by the now dissolved National Assembly.

Bahrain is a Cable & Wireless success story but to match demand and maintain standards an investment of £140m at 1977 prices will be required by 1982. The money will be spent roughly in the proportion of 60 per cent internal and 40 per cent international. Bahrain had 15 telephones for every 100 estimated population at the end of 1977 compared with 12 in the UAE and three in Iran.

International telex calls exceed 600,000 a year from 1,000 subscribers and the influx of banking and finance houses has led to a demand for telegraph and voice-grade leased circuits. Where supply has fallen back most is in domestic connections—a pattern repeated elsewhere—and, at the beginning of this year, Bahrain Telephones

had a backlog of about 8,000 applications. Cable & Wireless says one in three homes in Bahrain has a telephone though some of these homes probably double as offices.

Cable & Wireless has done equally well in Qatar which because of its low population ratio per 100 people. Twenty per cent of Qatar's estimated 180,000 people visited London last year which shows that there is a demand for a Western lifestyle. Oman, on the other hand, is still relatively underdeveloped. Cable & Wireless ran the telephone network before 1975 when this function was taken over by a 100 per cent government corporation, Omantel.

Exchanges in the capital area are severely overloaded and all international telephone calls have to go through the operator except for calls to the UAE. Waiting time for a call to London averages about 45 minutes but it can take longer than that to make a local call in Muscat. Businessmen employ small boys to dial numbers repeatedly in the

hope of getting through.

In the case of Oman the failure to keep pace with demand is clearly explicable in terms of availability of finance. Emirel, which was capitalized at £44m, has again this year raised working capital in the Euro-markets and is embarking on an investment programme of \$143m immediately and \$180m in the next two years. Its preference is to establish subscriber dial circuits.

In 1978 and 1979 links to neighbouring Gulf countries will be improved by a coaxial cable system for which tenders have just been called. The number of telephone exchange lines is expected to increase by an average of 40 per cent over the next five years and the growth projection for telex is only a little less at 38 per cent over the next five years.

Saudi Arabia, which in January this year signed the biggest contract in the history of telecommunications with a joint venture of Philips, of The Netherlands, L. M. Ericsson, of Sweden, and Bell Canada to expand the Saudi telephone system

by 470,000 subscribers may already be considering expanding the \$3,000m contract.

According to reports from Oslo, confirmed by the Norwegian consultants, a Saudi ministerial committee has proposed the expansion as the original survey for the telephone network was based on out-of-date census material.

Saudi Arabia's exchanges are today overloaded and unreliable and the Philips/Ericsson/Bell Canada contract is only one of several planned to give Saudi Arabia one of the most modern telecommunications systems in the world. A nationwide microwave system is being built by Western Electric, of the United States, under a contract awarded in May last year to do the second and third phases of a project begun by Sirt, of Italy.

Complete telecommunications systems are also being set up by the Royal Commission for Yanbu and Jubail at a cost of about \$20m. The Saudi National Guard will have its own nationwide telecommunications system for

which Cable & Wireless is expected to be the main contractor. By all accounts it is needed in Yanbu where the easiest way of sending a telex is by sending a courier to Jiddah.

Both the Saudi and the Emirel investment programmes are making full use of advanced technology. In the case of Emirel, digital systems have not been excluded from an expansion programme for 200,000 lines which on the same unit costs as the Ericsson consortium would be worth about \$1,200m. This is expected to be tendered later this year.

The tightness of the specifications will undoubtedly eliminate many potential suppliers, but this in itself provides the most telling lesson about telecommunications in The Gulf today. The shahkdoms want push-button technology and while the money exists to pay for it that is what they will get.

John Whelan is on the staff of the Middle East Economic Digest.



Bahrain's Cable & Wireless office.

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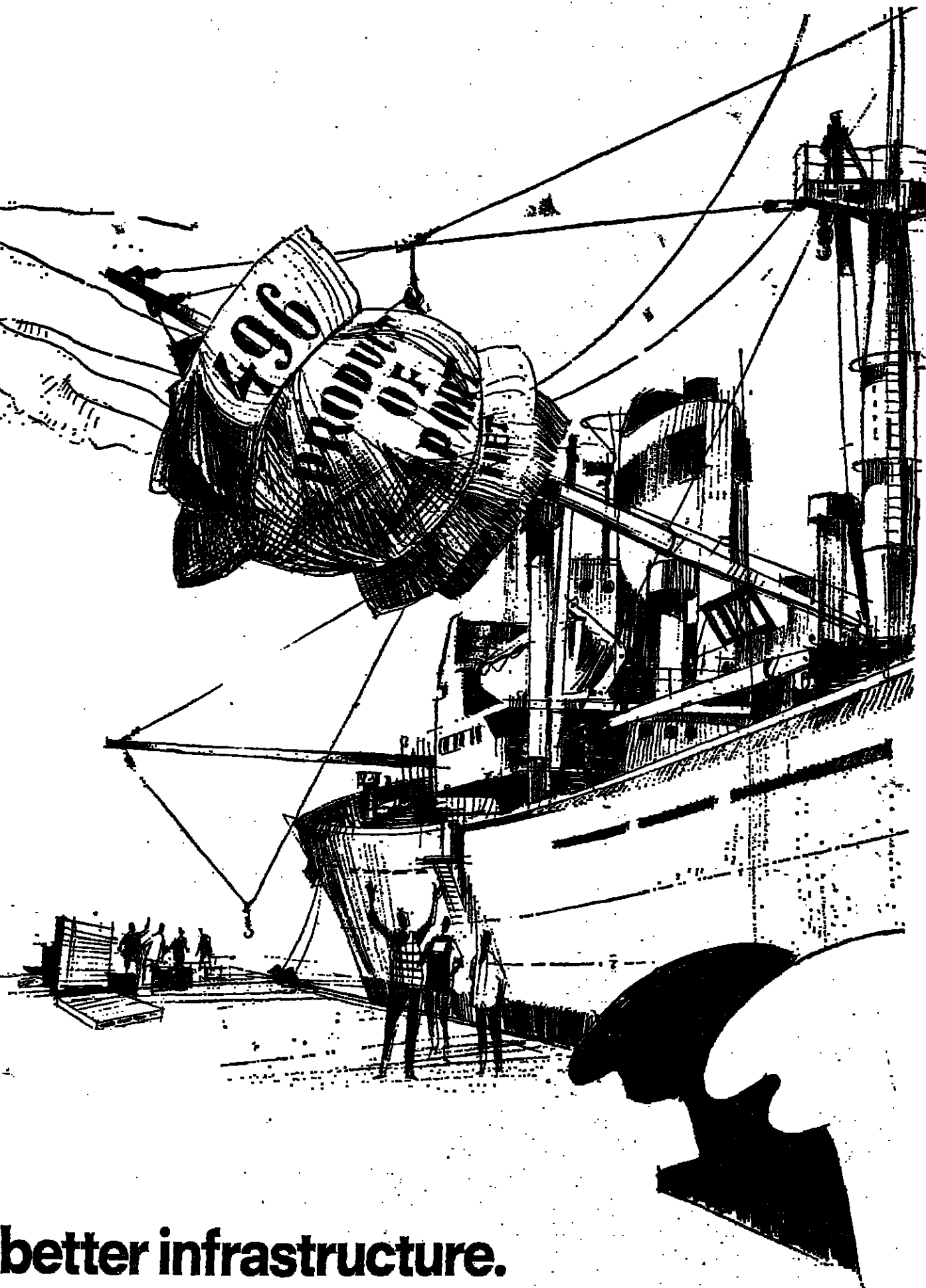
For the Arab countries, as for many others, exports are vital. Vital, too, is the information which is needed to speed products on their way. National Telex networks convey this and every other kind of information reliably, economically and quickly. Siemens is playing a significant role in the development of these networks.

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The proof of Mrs Gandhi's guilt

(To be continued)
Times Newspapers Ltd, 1978.

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Peter

Home Affairs Corri

How real is the 'threat' to Jews in Britain?

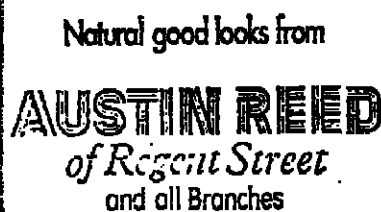
making them cling loyally to those they knew quick to suspect betrayal growth of "prison power" do the same thing imperative than the rest of union militancy, thou has been enhanced by cruiement to the service industry and from the army tradition of obeying or Machiavelli might a preseeu confrontation of the age-old divis understood between bar the princes at court, ing the monarch, whi littered history with bot battles. In this day and equivalents are the d officer and the hall bureaucracy. To the prisons look like g fortresses anyway. Behi towers and fortificatio local branches of the Officers' Club, the wai like barns of old.

Though the veil has been lifted much more by the House Office in recent years, the House goes on in prisons, the worsening crisis has not been treated with the urgency it deserves, in spite of more newspaper and broadcasting coverage. As in the case of race relations, warnings have been heeded or they have been dismissed as racialist, fanaticism, and action has been delayed until violence has made it impossible for the authorities to ignore it any longer. Their procrustean measures are themselves a recipe for trouble. As Martin Luther King once said: "Riotous behavior is the unintended consequence. Even now there is a dangerous tendency in official circles to dismiss complaining prison officers as trouble-makers. If they are trouble-makers, then the Prison Department has recruited them and in any case relies upon them to control the prison system. That does not mean that the case the prison officers put up has to be granted, but it does mean that troubles cannot be wished away. And if Mr Rees's announcement of an inquiry is successful in limiting industrial action, the pressure on the prison service should not be forgotten. For too long, the prison service has said it could cope when to outsiders it was patently obvious it could not."

Part of the trouble is that both the prison department and many of its staff have become so used to the prison system. The working of long hours in busy prisons has been the only

Peter
Home Affairs Comm

Do you look as if you mean business?



The National Front has been active since its formation. A few weeks ago it held a demonstration at Hendon and Stamford Hill which appears more frequently than others in cases reported in this paper last year. But although a few individuals and some local news papers have sounded the alarm, it is all a far cry from claiming "of pogrom" or "racial terror visited against Jewish people."

On the organizational level, the main racist cause of concern is the National Front. In a letter to *The Times* to which we have already referred, claimants state that the National Front "has a significant amount of electoral support from Jews". The substance of these allegations has been strenuously challenged by the Board of Deputies and no satisfactory evidence has been adduced to support them.

The main racialist effort of the National Front has been directed against the coloured population rather than Jews. But anti-semitic references abound in the issues of its monthly journal *Spearhead* and its chairman, John Tyndall, also writes in *Spearhead* (Tyndall repeated it so often) of his description of Jews as "poisonous maggots".

A more militant anti-semitic

laboratory more costly as elaborate publications, this year is a 70-page quarto booklet of "Nuremberg and other World Crimes Trials", by the same author. The conclusion of the tedious long argument is that the Jews were behind all these trials; that they were fabrications resulting in miscarriages of justice.

Understandably, some Jews have reacted emotionally to these anti-semitic manifestations. A proportion are themselves survivors of the Nazi terror who found refuge and built a new life in this country. But there are few Jews who do not bear some scars from the horrors of that era and it is difficult for them to react lightly any events which recall its beginnings.

It would be a hysterical overstatement to see in the rise of the National Front and the activities of the hunting fringe of anti-semites portents of holocaust round the corner or indeed any imminent threat to the Jews of Britain. Organized anti-semitism is weak and discredited in recent months, apparently losing ground as the National Front seems to be declining.

In two limited respects, overt discrimination against Jews exists. Some private clubs exclude them. And a quota system exists for Jewish students applying to some schools, although many of these are ecclesiastical foundations legitimately carrying on the intentions of their founders.

In this country, the totality of anti-semitism amounts to nothing more serious than minor irritants if they are looked at in the context of Jewish history and of current racialism. There is no country in the world in which Jews have been more free to live their lives as they wish, to make their own contribution to national endeavours.

Anti-semitism has been so fearful in its consequences and so tenacious a feature of western society that any evidence of its existence justifies vigilance and concern. Yet there are no present grounds for apprehension. British Jewry has been a source of insecurity for the enemy, but it has entered a profound confidence in the tolerance and reasonableness which still endure as the foundations of our society.

William Frankel

William Frankel

HELSINKI DIARY

Finland, like any other country, must hope not to suffer too much from its stereotypes. So it is unfortunate for the Finns that the Soviet Union, which has been preoccupied with Helsinki for the past three months, did actually start in a sauna.

One of us (we are told) is the presidential sauna bath, where President Kekkonen, notwithstanding his advancing years, likes to entertain his Russian guests. On one occasion Marshal Ustinov, the Soviet Defence Minister, is paying his first ministerial visit. Perhaps one or two generals in a state of relaxation are also in attendance. The temperature must be about 100 degrees Centigrade.

One does not know quite how diplomacy is conducted in these conversations. It is widely believed in Helsinki that, in the course of this session, the Russian marshal introduced the idea of joint Soviet-Finnish military exercises as an expression of solidarity with their Russian treaty assistance, which the two countries signed in 1948.

In the sauna the marshals received either a dusty answer or, more properly, no answer at all. There the matter must have been allowed to drop. For the Finns regard the sauna as a privileged institution in which matters can be raised and discussed entirely without prejudice. After all, who would want to discuss intelligence and armaments changes conducted by two naked men sitting in a hot little chamber on slats of Finnish

pine? No doubt the Finns expected the marshal to treat him with indiscretion in the same spirit that they had—in other words—to forget it.

That was not to be. Apparently he raised the idea again at a lunch in the Soviet Embassy, where everybody was fully dressed and a rather wide circle of generals and admirals was present. Moreover, Helsinki's Stalinist newspaper, which is not known for taking any initiative without the tacit approval of the Soviet Embassy, three times came out with the suggestion that joint Russian-Finnish exercises should be held.

This provoked much speculation among ambassadors and guidance and received none. Doubtless they cabled anxious speculation to their capitals.

Even the Finns found that the facts were eluding them since the Government had not once again retorted behind that inscrutable barrier which President Kekkonen always erects around his dealings with the Russians.

Behind the barrier, however, the Finns sought clarification from Moscow. Did Marshal Ustinov's "suggestion" reflect a new Russian determination to make the 1948 treaty more binding on Finland? The Finns may have received reassurance from the political leadership in the course of the year, but President Kekkonen met Mr Kosygin in Moscow, first in the Russian ambassador's dining room of Kostomarov and then in Petrosavotz, the matter seemed already to have been settled.

The question continued to create uneasiness in Helsinki, and on October 10 the Defence Minister made a statement in Parliament. He denied that any

"proposal" for joint military exercises had been made as it went on to say that, though it is the 1948 treaty provided for "military cooperation between the two States in accordance with the terms and conditions precisely defined by the treaty"—an invasion of Russia's territory by armed forces using Finnish territory—peace-time joint military exercises would be "incompatible with Finland's international status."

So Russian pressure to make Finland a fast-weather ally as well as a west-weather one has not been resisted by the Finns more decisively than ever before. Marshal Ustinov's sauntering both indiscretion had created exactly the opposite effect of that which he must have intended. His strategy was made in the first place.

Certainly the Russians have always been preoccupied with the 1948 treaty. They do not regard it as their "policy" but as their "policy of neutrality," and in the terms of that treaty, Finland cannot be absolutely neutral.

The Russians prefer the formula that Finland is "strictly neutral," and that is strictly correct, since the underlying objective of Finnish foreign policy is to strive to remain technically neutral by preventing circumstances arising in which they would be forced under the treaty to abandon neutrality, and still save themselves with Russia.

Perhaps Marshal Ustinov could have been trying to harden Finland's position in Russia's favour; or perhaps it was just one more sign of increased Soviet defence activities in the Baltic. Alternatively, the Russians could have been hoping to exploit their friendship with President Kekkonen.

will visits both ways, the Russian point of reliability of the general staff is an factor. It has not been ted. There may be sympathizers in jun and one or two ac flirt with some of political parties to ac motion. But, in secu the Finnish military is not.

What better way, for the Soviet Union up a little than by en Finns in a program training? Now the R worse off than the R. However, the sag illuminated—if that the right word for which is kept myster point of murkiness revealing way that Kennedys' comparisons with the Russia Finns really have to much in the dark President's dealings cov? There is en tioned self-censorsh sink as it is.

More serious the affair confusio that President with his primacy affairs and his appa relationship with it has created a situ: the Russian quest ize dominates F President's regard support policy as a perma test of peo-ple's p ability in every of If that is the case, t stumbled on the another stereotypen.

Charles Doug

Charles Doug



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COUNTER-PRODUCTIVITY

all the elements in the speech on Wednesday the most controversial was the proposal to introduce a permanent statutory scheme to pay benefits to those put on to short-time working. The basic notion is put forward in a consultative document last April. Nevertheless, there is very little agreement at present about how such a scheme would in practice work. In theory there could be severe problems with any such scheme. It could be wide open to abuse by employers and manipulation by employees. Until the details of what is under consideration are published it is not possible to make any final judgement, but what is being proposed is, in effect, a scheme which would not be supported, if the small effect is simply an increased and more cleverly disguised subsidy for inefficient industry.

The present administrative arrangements when a worker is put on to short-time work are doubt very complicated. A way in which lost earnings in part made up by benefits from the National Insurance scheme and in part by income tax rebates is clumsy and extremely expensive to administer. The Temporary Employment subsidy is open to doctrinal objection from the EEC, because it is an unfair subsidy to the employer, and open to the practical objection that it distorts the

allocation of resources by being in effect a bribe to employers to keep on workers that are not wanted in a particular industry, or company. Further, the present unsatisfactory position of those put on to short-time working means in practice that many employers are faced with a stark choice between keeping on workers full time in excess of requirements and declaring straight redundancies.

In theory, therefore, a scheme which had as its purpose the creation of a framework within which companies could be more flexible as between full-time work and sackings, and which redeployed the present financial resources taken up in benefits, redundancy payments, tax rebates and the like, might have some real advantages. Unnecessary redundancy, caused perhaps by cyclical or seasonal factors, can have damaging social and industrial consequences. Provided that there was no net extra burden on the tax payer or on industry and commerce directly, such a scheme could well be supported.

The likelihood, however, is otherwise. Even in its outline presentation it is being said that the scheme will involve increased net expenditure from public funds and an increase in employers' national insurance contributions to the new fund. In practice, once individuals and particular companies found how best to use the new scheme for their own benefit, it seems inevitable that a scheme on the lines being proposed would have the effect of further slowing the process of industrial evolution and change.

their own benefit, it seems inevitable that the total costs would be considerably higher than those now being advanced as estimates.

More fundamentally, the scheme can only have the effect of further reducing the average productivity of British labour. Its purpose is so to weight cost structures as to encourage companies to keep on more labour than they need. There can be few industrial economies where further reduction of labour productivity is more inappropriate than ours. Since, presumably, all companies will be required to pay into this new short-time working fund, but only the less successful will be drawing benefit, there will be further subsidy of the weaker sections of the economy by the stronger. The larger the scale of any such scheme, the stronger will be the forces of inertia propping up the weaker sectors of the economy and slowing the redeployment of resources into more productive activities. The preservation of existing jobs for their own sake, regardless of changed economic circumstances, has become a major source of weakness in the British economy. Given the nature of political pressures, it seems inevitable that a scheme on the lines being proposed would have the effect of further slowing the process of industrial evolution and change.

glib simply to accept this idea on the basis of such general considerations. Secret Service activities cannot be treated as other operations of government. Even the most ardent devotee of open government must acknowledge that their success must depend upon their secrecy. The question therefore is whether there is anything of value to be learned about their activities through the establishment of such a committee that would not at the same time undermine their usefulness.

American experience is in one sense instructive, in another misleading. Congressional investigation into the CIA in the aftermath of Watergate led to the disclosure of a range of activities that most Americans had not suspected and which shocked them deeply. It also seriously weakened the effectiveness of the agency. The security services of other countries, and individual contacts, have been much more reluctant to cooperate for fear of themselves being exposed to public view.

That fate would certainly be visited upon Britain's security services if their contacts with the agencies of other countries were to be subject to parliamentary investigation, no matter what apparent safeguards might be woven into the system. Any form of parliamentary scrutiny might

Lack of experts in electronics

From the Duke of Kent
Sir, Your recent Special Report on engineers (October 25) rightly pointed out the serious lack of them which industry is facing, but I should like to draw attention in particular to the present critical shortage of people skilled in electronics technology in the United Kingdom.

The National Electronics Council views with alarm the existing acute shortage of electronics experts at all levels in industry; the supply is quite inadequate even to meet present requirements and is now down to only half the demand in many leading companies.

And if current trends continue the outlook cannot be bright. The rapid introduction of microelectronics is already making itself felt; almost daily we are reminded of the great changes that are imminent in our way of working and living.

Whereas in the past machines extended the capacity of human muscle, now electronics greatly extend the capacity of human logic, experience and even intuition. Electronics is more than "just another" engineering industry; it amounts to a new way of life.

All forms of industry, whether in manufacturing or the service sector, are likely to be affected by the new developments in electronic techniques, if only because failure to adapt to them could mean bankruptcy. This very rapid advance will bring about a steep increase in the need by many kinds of industry for properly trained people capable of making the best use of the new technology.

The demand for qualified people is already upon us and it will grow fast. These men and women will become the new elite of our industrial world and we cannot therefore afford not to educate, train and above all, reward them accordingly.

My Council believes that a strong lead is needed from Government, from the educational authorities, from trade unionists, and particularly from the leaders of industry, to encourage our young men and women to become skilful in the use of this new and vital technology.

Our competitors abroad are already galloping into this field. If we are to keep abreast, let alone push ahead, we must accept the challenge and be ready to take the action now which will at least ensure we are fully equipped for the task.

Yours faithfully,
EDWARD,
Chairman,
National Electronics Council.
11 Euston Road, London, NW1
John Ishp Street, SW1
November 2.

Shares for employees

From Mr Nicholas Davenport
Sir, Mr Weston-Smith's letter (October 30), commenting on the foolish idea that employees should be expected to risk their savings as well as their jobs in the employing company, recalls my original letter which stated this correspondence was not a matter of the rails.

To end the allegation of the working class now evident in "lightning" and irresponsible strikes, I ventured to suggest that the workers be given a slice of the national equity so that they could build up a non-inflationary income from dividend-paying shares.

To give them shares in their employing companies would not meet the case because workers in the public sector would be left out. I therefore put forward the giant public unit trust which would hold billions of shares in the private sector and billions of units in the public boards.

Dividends from this public unit trust would be constantly rising if growth in our economy can be sustained. It should be held in trust for the benefit of all, and not for the few who would be paid for their cost.

A foolish letter came from the Director General of the Institute of Directors claiming that I was advocating the redistribution of wealth and forcing the creation of a new class of workers, feeling that at long last they were part of the national equity, decided to raise their productivity.

Mr Weston-Smith said, but Mr Hildreth did not, this would end the existing horror of "two sides of industry"—the beggar-my-neighbour game which is ruining the country.

Yours faithfully,
NICHOLAS DAVENPORT,
The Athenaeum,
Pall Mall, SW1
October 31.

Moron in a hurry

From Mr A. D. Walker
Sir, One is obviously reluctant to detract from the amusement given by Mr Levin (October 31), but unfortunately his facts are wrong.

Mr Justice Foster did not say that "the two papers could not be confused over by a moron in a hurry." He said exactly the opposite.

Putting the two papers side by side, he found that the two papers were so different in every way that only a moron in a hurry would be misled.

That point was entirely well made since it is well settled law that confusion by what Mr Justice Megarry in another case described (perhaps more politely) as "a very small unobservant section of society" can be ignored.

Perhaps it was Mr Levin who was... in a hurry.

Yours truly,
A. D. WALKER,
21 Holborn Viaduct,
London, EC1
October 31.

Need for reform on Official Secrets

From Mr Anthony Lester, QC

Sir, As Mr Peter Hennessy and Mr James Michael have reported (October 21, in January, 1975, Mr Roy Jenkins, Sir Arthur Patterson, Mr Hayden Phillips and I visited the United States to obtain first-hand knowledge (inter alia) about American law and practice on official secrecy and freedom of information. However, their informative article must give the mistaken impression that the visit was superficial and that we rejected what we saw and heard.

In Washington DC we attended two seminars which were specially arranged to enable us to discuss the issue with legislators, civil servants and Open Government lobbyists. We also met the senior editorial staff of *The New York Times* and the *Washington Post*, the former United States Attorney General in whose name the Freedom of Information Act had been introduced in Congress in 1966, and experts at Harvard Law School. We were given and studied a considerable amount of documentary material.

With hindsight it is clear that our visit was unfortunately timed because it was premature to evaluate the effect of the legislation at that time. In January, 1975, the Freedom of Information Act had only recently been strengthened and its benefits had been mainly enjoyed by consumer groups and commercial competitors.

The Americans did not then appear to regard it as a valuable means of obtaining official information to which they already had comparatively easy access. The statute seemed to have created unnecessary costly and bureaucratic methods of reducing governmental secrecy, relying excessively upon litigation for its enforcement. There were also important differences in constitutional and legal traditions across the Atlantic.

We were firmly advised by most of our American informants to concentrate on reducing the criminal sanctions of our sweeping Official Secrets legislation to the irreducible minimum and to devise less formal methods for increasing the public disclosure of official information.

Unhappily, however, it proved impossible to achieve these aims for reasons which will become fully known only when the relevant Cabinet papers are published under the 30-year rule in 28 years' time. But it would be quite wrong to suppose that our American visit made

enhancing the greenhouse effect and increasing the surface temperature.

The exploration of the Solar System has shown the Earth is the only planet currently capable of supporting life as we know it here. At the same time the climate of the Earth is a delicately balanced ecological system, which could be perturbed through the advancement of modern technology and human activities.

But rather than turn a blind eye to the situation, or simply accept the first statements on the subject, a detailed scientific appraisal of the situation is always required. In this way the most knowledgeable people may assess the full implications of man's activities and a decision made in the light of our best understanding of the scientific problem.

At this time, the decision to seek a substitute to freons for aerosol propellants must be viewed as in the best interests of us all on Earth.

Yours faithfully,
GARRY E. HUNT,
Laboratory for Planetary Atmospheres,
University College London,
Gower Street, WC1
November 2.

Governing Ulster

From Mr Hugh Munro
Sir, Professor Budge (October 30) deplores the fact that "by fragmenting the Unionist Party... the British Government deprives itself and the north of authoritative Protestant spokesmen."

Now Britain can claim the right to fly her flag over Northern Ireland by virtue of the fact that a majority of the province's population feel themselves to be British. What their religion may be should have nothing to do with it.

But if, to the province, she has, as the Professor suggests, no political voice, then she has landed herself in a situation where she claims sovereignty over the province by virtue of having taken the majority side in an Irish sectarian quarrel; which is hardly a policy for a Professor of Government to applaud.

May I sum up this correspondence? Neither the British nor the Southern Irish want to integrate with the Northern Irish; but at least the Southern Irish are open to the idea whereas the British are not.

And if the province remains unintegrated (ie, if it remains a separate political unit) it must be ruled either by a Protestant-dominated devolved government or as a colony. The former is not acceptable; it may be second, however acceptable it may currently be, cannot be a lasting policy. My article was an attempt to lay down a rule, while recognising its present virtues.

Yours faithfully,
HUGH MUNRO,
1 St Kevin's Park,
Derry, Dublin.

Inquiry into lorry weights

From Mr James Robertson

Sir, Alarm has been expressed that civil servants in the Department of Transport are in favour of raising the permitted size of lorries to 46 tons, and are contemplating the tactical use of a public inquiry in support of their aim (*The Times*, October 31). I share the alarm, and I believe this raises a general issue of great importance.

Civil servants have a duty to formulate and recommend policies which they believe to be in the public interest. When they are given a particular responsibility—as for road haulage, or for Concorde or the nuclear industry, to take two other examples—they almost inevitably perceive the public interest as requiring them to promote the vigorous development of their charge. Thus, whatever their personal leanings might originally have been, in their official role they cannot avoid joining with the late E. F. Schumacher in calling "the forward stampede."

Those of us who are interested in the possibility of "another development"—a change of direction, away from the ever-increasing dominance of bigger machines and organizations, towards a saner, more humane, more ecological way of life—must face realistically what this means. It means that on all the wide-ranging aspects of the basic choice which faces Britain today—whether we should aim to become a super-industrialized, technocratic society or a humane, people-centred society—it may not be reasonable to expect from our policy-making civil servants the degree of neutrality which we used to expect them to maintain between the old alternatives of Left and Right.

It is pointless to blame the civil servants for this. A more practical course will be to develop new modalities of policy-making and policy-decision which recognize that, on a growing number of increasingly important issues, the energies and resources of the civil service are likely to be committed over overwhelmingly one side of the argument against the other.

Yours faithfully,
JAMES ROBERTSON,
7 St Ann's Villas, W11,
November 1.

Possible threat to ozone

From Dr Garry Hunt
Sir, The recent letters by Mr Sloane Stanley (September 27) and Mr Barnes (October 9) are both against the proposal... to commit needless funds to a substitution of aerosol propellants since they each believe these propellants would have little effect upon the atmosphere. I believe this statement to be incorrect.

The creation of ozone in the stratosphere at an altitude of 20 km through the action of solar ultraviolet radiation on oxygen is essential to all forms of life on Earth, shielding the harmful solar UV from the surface layers.

But there are two important cycles which take place in the atmosphere and destroy ozone. The first involves nitrogen oxides, which may be created through solar flares, cosmic rays, supernovae or through man's activities with farm fertilizers. A second cycle involves chlorine, which in addition to a natural source, now appears in the atmosphere as freons from aerosol propellants and from air conditioning units.

An increase in the freon concentration may also affect the overall climate of the Earth too, by

enhancing the greenhouse effect and increasing the surface temperature.

At this time, the decision to seek a substitute to freons for aerosol propellants must be viewed as in the best interests of us all on Earth.

Yours faithfully,
GARRY E. HUNT,
Laboratory for Planetary Atmospheres,
University College London,
Gower Street, WC1
November 2.

Selling church treasures

From the Reverend R. J. Castle
Sir, Mr Nightingale's conclusion (October 30) must be questioned: that treasures which have been given with the intention that they be retained "to the greater glory of God and for the spiritual enrichment of the community concerned" are held in trust and the church has morally no right to sell.

Donors do not normally make it a condition that their gift is to be retained in perpetuity. At that point in time the thought of eventual disposal is far from anyone's mind.

Over the centuries churches (cathedral and parish) have received many gifts in the category that Mr Nightingale describes: furnishings, plate and accessories of all kinds, not all capable of being described as treasures.

Unfortunately, sometimes a donor presents an item which it would be embarrassing to decline, but which is not what the church really needs. If churches were to keep all the items that they have been given (be they chalices, chairs or Bibles) many would need a small museum!

It must be possible for a church to dispose of donated items that, for one reason or another, they can do without.

Yours faithfully,
ROGER CASTLE,
The Vicarage,
Hayfield, Stockport,
Cheshire.

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VIETNAM TAKES ITS PARTNER

of the techniques of warfare it goes back to the Sun Tzu sic on Chinese strategy is the ie of flouting an enemy. The antage to be gained by this avour is greatest when the my is known to be stronger may not be aware by how h. Real skill might even ect his attack. Such psycho- cal warfare of the third cen- BC would have been con- ted with flags, drums, sym- ; with marching and counter- ching, its success depending n the conviction with which enemy was scorned. Modern ies of psychological warfare ude well-publicized diplo- ic visits if not to the enemy's parts at least to the smaller vers in his vicinity. uch was the intended impact Mr Hua Kuo-feng's visits to nania and Yugoslavia. In nelves they were no more n normal diplomatic ex- ges: President Ceausescu l been several times to Chi- ; silent Tito had been warmly lcomed in Peking last year. ; judging by Russian reaction both visits the anxiety caused Moscow was accounted a ted by the Chinese. So, too, h Mr Teng Hsiao-ping's stay Japan, celebrating the signa- e of the Sino-Japanese treaty, re again Soviet threats to an had not been enough to rn them off any more than

their displeasure had stopped China's Balkan hosts. Mr Teng in Tokyo was ready to make the most of what the Chinese wanted all to see as a victory.

Now it is the Russians' turn to score against the Chinese, for their expansive welcome to their visitors from Hanoi, Mr Le Duan and Mr Pham Van Dong, respectively the party and government chiefs from Vietnam. Coming from a country that has been for so long either a vassal or a close and dependent neighbour of China's, the allegiance now proclaimed for Moscow must seem more than usually damaging to China's interests. That Vietnam should have joined Comecon (somewhat the chagrin of the eastern European states who see their economic burden thereby increased) only underlines the insult.

The Russians, however, can feel that Vietnam is a more potent ally won to their camp than anything China can yet claim from the "fellow-feeling" evoked by Mr Hsiao's Balkan tour. Mr Teng's triumphant appearance in Tokyo, both President Tito and President Ceausescu, according to their own prudently calculated need, took some trouble to soften Soviet anger at the visit of their Chinese friend. The Japanese, quite apart from the proviso included in their treaty with China that it did not affect their relations with third coun-

tries, promptly sent a mission to Moscow to protest that their goodwill for the Soviet Union was unchanged. But not so the Vietnamese. There will be no stopover by the Vietnamese in Peking on their way home to assure the Chinese that they need not fear unduly Vietnam's Soviet partnership. On the contrary, any anxiety caused to China has been precisely an aim of the visit.

Does this mean that Vietnam is now a willing member of the Soviet camp? On the face of it, perhaps. If so, the status is not one that most Asian countries are disposed to honour. Non-alignment is the current creed. Mr Pham Van Dong knows this very well. The last thing he wants is for his country to be regarded as a dependency of the Russians. At his recent tour of all south-east Asian capitals the denial of any such dependency was his most fervent message. Vietnam wants to be as non-aligned as all the rest. Not all those addressed may have accepted the plea, although admitting that Vietnam's nationalism has been as robustly maintained as any. As for the Chinese, angry as they are, they will have to bear with a desecration from the camp over which they presided for so many centuries in the past, confident that the true links that bind its members will before long be restored.

Defence against dogs

From Mr J. R. Stewart-Smith
Sir, The postman's occupational hazard of being bitten by unfriendly dogs has once again been featured in your columns. May I offer some advice gained while employed licensing dogs by a city council in New Zealand?

Before leaving home pick up a friendly, portable dog and rub the fur from its backside firmly up and down the lower part of each trouser leg. Hostile dogs are soon lulled into believing one is a "doggie's friend".

Yours faithfully,
J. R. STEWART-SMITH,
Yew Farm,
Firbeck,
Workop,
Northamptonshire.
October 24.

The hottest seat

From Mr Alan Butterworth
Sir, Would I be right in thinking that it is only a football manager that one can sack these days?

Yours faithfully,
ALAN BUTTERWORTH,
New College School,
Savile Road,
Oxford.
November 1.

Hampton Court limes

From Professor Peter Shepherd
Sir, While in America I read in correspondence columns the disturbing news that a committee had recommended the clear felling of one and thus by implication of the lime avenues at Hampton Court.

I recently revisited and inspected these venerable trees. How wonderfully they show how nature and man can transform our somewhat (I feared) English essays in 17th century absolutism!

Instead of clear-felling, which would have suffered several times, these avenues have been maintained by gradual replanting so that the old trees have always stood among their younger successors, adding the avenue the majesty of marriage of classical order and

romantic picturesqueness, unequalled in the world.

At least a third of the trees in this avenue are quite young. Perhaps 15 or 20 out of the 180 are old enough to need replanting. Some others have been badly lopped; they are not really dangerous and careful tree surgery could make them totally safe.

The grand scale of the mature trees, foreseen with such altruism by those who planted them, is essential to the scene.

As inheritors of these numinous groves, how dare we rob several generations of the pleasure they give, all for the sake of restoring a kind of order which the genius of the English landscape has never felt entirely at home?

Yours faithfully,
PETER SHEPHERD,
60 Kingsley Street, W1.
November 1.

Plain Jane

From Sir Douglas Hubble
Sir, Was our affectionate familiarity with Mr Austen begun by Rudyard Kipling?

Jane lies in Winchester, blessed by her shade! Praise the Lord for making her, and her for all she made.

Yours faithfully,
DOUGLAS HUBBLE,
Yonder Hill, Thirover,
Cold Ash, Newbury.
October 25.

FOREIGN REPORT

Incidents with Soviet Union increasing

Norway pursues vigorous Spitsbergen policy

Norway and the Soviet Union are engaged in an increasingly delicate diplomatic battle concerning the Arctic regions, where they share a common frontier. There has been a growing number of incidents, notably on and around the Spitsbergen archipelago over which Norway has sovereignty.

In Norway politicians and defence strategists have become only too aware of a cooling in relations with the Soviet Union. At the same time the Oslo Government is determined to ensure that its northern policy is both forceful and vigorous.

Close to the Norwegian-Soviet frontier, around Murmansk and stretching into the Kola peninsula, is one of the largest military concentrations anywhere in the world. The area is alive with Soviet troops and airfields. It is also the home of the Soviet northern fleet.

The strategic importance of Spitsbergen has been recognized both by the Russians and the West since 41 nations signed the Treaty of Svalbard nearly 60 years ago. It then became a "no-go area" with its use for

military purposes and the construction of military fortifications expressly forbidden.

But only Norway and the Soviet Union have exercised their rights of access to the archipelago with the establishment of permanent communities. For the Soviet Navy the freedom to pass between the North Cape of Norway and south of Spitsbergen into the waters of the North Atlantic is of enormous strategic importance, even today.

Russian concern over the security of the sea route manifested itself as far back as November, 1944, when Molotov, the then Soviet Foreign Minister, called on the Norwegian Government to agree to a revision of the treaty under which Spitsbergen and the neighbouring Bear Island would become a Norwegian-Russian condominium.

The objective did not materialize. But the Soviet Union has continued to adopt a cavalier attitude towards its rights in Spitsbergen—to the growing disenchantment of Norwegian ministers and administrators.

The incidents have included violation of Norwegian territorial waters by Soviet merchant ships. Without any formal request for permission, the Soviet Union has also built a landing strip and helicopter base at Kapp Heer near the Russian settlement of Barentsburg on Spitsbergen, and even more recently has installed a mobile military radar station at the base.

Helicopters used by the Russians on Spitsbergen are of a military type. The crash of a Soviet reconnaissance aircraft on the island of Hopen, part of the archipelago, served to focus still more attention on Spitsbergen.

This flurry of incidents—and in particular the crash of the reconnaissance aircraft—have all served to promote a more anxious debate of Norwegian policy in the northern regions.

As Mr Kaur Frydenlund, the Norwegian Foreign Minister explained: "Technological developments have opened the way to exploitation and increased traffic in areas which have previously been inaccessible. The whole course of

development in weapon technology underlines the strategic importance and security/political aspects of the problems connected with the northern regions."

The establishment of economic zones and new territorial limits under the aegis of the Law of the Sea Conference is another factor which is of considerable importance in Norwegian policy for the icy and inhospitable north polar regions and in Oslo's relationships with the Soviet Union.

The Soviet Union and Norway have been negotiating a delimitation line in the Barents Sea since 1970. Norway has argued consistently in support of the median line principle with the Russians insisting on the sector line principle for the division of the waters. Given such fundamental differences, the prospects for agreement are remote.

Another outstanding issue concerns continental shelf areas around the archipelago itself. Here Norway has found itself in conflict not only with the Soviet Union, but with other signatory powers to the treaty,

arguing that the provisions of the treaty concerning equal rights of access do not extend to the shelf area.

For the moment this basic disagreement is not a problem but in the medium term, and with prospects of oil being found beneath the sea off Spitsbergen, it will become a major issue and one in which Moscow has a very close and vested interest.

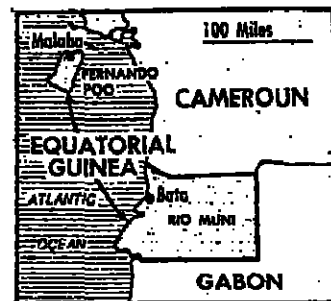
Meanwhile the war of words and diplomatic exchanges continues. It seems unlikely that Moscow would be prepared to face the Western allies in any direct political confrontation over the northern regions or in Spitsbergen. But equally, the Soviet Union and its strategic planners are clearly equally anxious to ensure that its policies and attitudes and activities on the Spitsbergen archipelago continue to be implemented.

Overshadowing that concern is anxiety that its position is not compromised by Norway or any of the two score signatories to the Treaty of Svalbard.

Peter Hill

Africa's least-known country

One of three Guineas



airport. Others have died in prison.

I visited the capital, once called Santa Isabel and renamed Malabo. Because no unwanted foreigners go there, there was no mechanism for surveillance and I could move around freely. But there was no opportunity to get in touch with the local people because they are forbidden to have any communication with foreigners. On the other hand, the everyday behaviour of officials, soldiers and militiamen towards the ordinary citizens was eloquent enough.

Ten years ago the capital was a popular place for weekend excursions from Nigeria, Cameroon and Gabon, with about 600 ships arriving every year. It was famous for its beauty and friendly Mediterranean ambience. The restaurants excelled in seafood and the shops offered an abundance of goods at free port prices. More important, it was relatively free from racial discrimination and much of the prosperity was within reach of the African population.

The beauty remains. Houses were well constructed and most of them still stand, although many are now empty. But the appearance is that of a ghost town, hit by war or plague. The central post office is closed, with a rusting iron bar across the doors. The national bank was publicly executed in 1976. Most of the ministries have no budget and their buildings are locked. The pharmacies are open, but sell only headache pills.

The only hotel has electricity intermittently and running water one hour a day. There are no restaurants and shops are closed. Trade at the central market place is done by women, sitting on the ground, selling pitiful quantities of bananas and manioc. Grain, meat and dairy products are no longer obtainable and fishing is the exclusive privilege of travellers from the Soviet Union. Nobody on the island is allowed to have even a canoe, which might be used for escape.

The famous plantations which once produced the best cocoa in the world are abandoned. The cocoa is rotting on the trees, the feeder roads are overgrown and valuable trees have been cut down to make way for primitive banana cultivation. There is no public transport and apart from an occasional Land Rover nothing remains of the vehicles for which one still sees advertisements in deserted workshops and filling stations.

In short, the once prosperous island has gone back to a level of rural subsistence with food poorer in quantity and quality than in precolonial times. Most commodities are non-existent, or priced beyond reach. Necessities like salt and soap cannot be found.

Yet the economic conditions pale into insignificance in comparison with the political sys-

tem. The mechanisms which govern life in Equatorial Guinea are elementary, brutal and effective. All power emanates from President Macias and his small circle of relatives. The constitution has been casually swept aside and political communists, soldiers and militiamen have a vast latitude to interpret what remains of the legal system.

Punishments are meted out to those accused of subversion. Except for some show trials in the past, accusations do not have to be substantiated, it is enough to be accused by someone in power. Punishments are given for such crimes as pointing one's finger at a picture of the President, using somebody's Christian name, nor attending manifestations of praise and joy on national feast days, or being "discontented".

Conditions in the jails must be ranked among the worst in the world, making the distinction between imprisonment and a death sentence somewhat academic.

There is no freedom of movement. Nobody may leave his town or village without official permission, or arrive anywhere without being registered by the authorities and showing his membership card from the only political party. Permission is not usual granted to visit one's family.

Duties have more and more become those of forced labour. In an attempt to counter a breakdown of production as exports, President Macias decided in 1973 to recruit 60,000 "national workers", mainly the cocoa and coffee plantations. So far it appears that only about half of this work force has been mustered, but the system is well established.

The labour camps are tough with a 12-hour working day. The severity of control varies. When bad, it means beating the withholding of food rations, random brutality and occasional killings. When conditions are good there is some leeway such as allowing women to earn out subsistence cultivation or leaving the workers unmolested as long as they fulfil the quota. Under no circumstances is the payment, medical care, or freedom to communicate with one's family or go home.

Against this background it is hardly surprising that vast numbers of people have fled the country. Official figures state that there are 60,000 refugees in Gabon and 20,000 in Cameroon. About 5,000 are in Nigeria and 6,000 in Spain. This means that approximately one third of the population is in exile, usually in very difficult conditions. Recently the United Nations High Commission for Refugees has assisted them in getting legal recognition, but the whole they are forgotten refugees.

The outcome can be summed up in a few words. It is no question of the good outweighing the bad, or vice versa. It is a case of a regime which has brought a country to its knees, eliminated its élite, driven an estimated third of its population into exile, deliberately subjected the remainder to a system of unrelenting terror. The question which remains is why the world accepts it.

Robert Af Klintebe

Burma regime's limited control

Elusive Chinese prize

No country has put so much pressure on neutralist and stubbornly independent Burma over the years as China. Despite this President Ne Win, just back from a seven-week stay in Europe, accepted yet another invitation to visit Peking. The Burmese leader has paid a total of 10 visits to the Chinese capital, two were made last year, and Mr Teng Heiao-ping, the Chinese Deputy Prime Minister, who is an old friend of the President, had six days of talks with him in Rangoon early this year. Yet the prize which General Ne Win has been seeking still eludes him.

He wants China, which maintains "correct" relations with Burma, to stop its material support for the Burmese Communist Party guerrillas fighting the Burmese Army in the Shan states along the border with China. The Chinese also give the insurgents, estimated at 30,000, sanctuary at points along the frontier.

It is hoped in Rangoon that if China is now competing with Vietnam to win over the members of the Association of South East Asian Nations (Asean) and is willing to pay the price of having to abandon the support of the various local communist guerrillas, it might be persuaded to make a similar gesture for President Ne Win.

The Burmese guerrillas represent the most serious threat to the 15-year-old regime because, unlike the dozen or so other insurgent groups in the country, they have an ideological and not solely an ethnic appeal.

Since May, 1975, when Rangoon announced the routing of the communist guerrillas in the Pagan Yoma mountains about 100 miles north of the capital, and the death of Khin Zin, their leader, they have left the Burmese heardland for the far north.

Only a few weeks after Mr Teng's visit they launched a fresh offensive against the Army, which has been in action

most of the time since independence.

If President Ne Win received his "prize" from Peking the Army might be able to put an end to the communists, as a substantive armed threat—although they would doubtless continue subversion underground—and then perhaps proceed to a political settlement with some of the ethnic insurgent groups.

The Burmese Government's power still only extends over about half the country geographically, and the only legal way to enter it is by Rangoon airport. Very exceptionally, travellers are permitted entry on ships calling at Rangoon port.

All the land entry points from India, Bangladesh, China, Laos, Thailand and Malaysia are either not safe from insurgents or are under their control. (Even to go to Arakan, bordering Bangladesh, to see the repatriation camps for the Muslim refugees, I was accompanied throughout by an armed police escort.)

Nonetheless, President Ne Win felt able to go away for seven weeks to Europe. After twice purging both the Army and the Socialist Programme Party, the country's sole political movement, when there was an attempt on his life last year, his position seems strong.

The fundamental reason why his regime has not obliged the prophets of its imminent collapse is simple. By consolidating the Burmese heardland, where the main ethnic group, two thirds of the 30 million Burmese, live, the habitually xenophobic Ne Win regime satisfies the nation's most elemental need.

Despite the estimated 3,000 political prisoners, a muzzled press and radio and rigid controls which isolate everyone from the lowly citizen to senior civil servants, the regime can say it represents the Burmese against all the rest, including the outside world.

Last year ministers arrested and 50 senior civil servants dismissed. Once a President Ne Win demonstrates his superior manoeuvring and will-power.

Life continues to be hard for the Burmese although with the withering poverty of a new India. A decline in rate of price increases for essential goods, compared with aftermath of the 1973 world crisis, which sparked the popular unrest, has also helped the regime.

Apart from the authority regime's domestic problem one of its basic motives, "outlet of the world" to shut out the pressures of its mighty neighbour, China, has been to last for 10 years until General Ne Win had a new constitution approved in a plebiscite December, 1973, and then came somewhat less rigid.

It has not meant any significant shift in Burma's pendulous foreign policy of a more flexible approach to foreign investment, as by the February, 1977, congress, has been largely lied. It was, it seems, a personal shift dictated by President's feeling that it became constitutionally specious.

After last year's purge held a general election candidates drawn from armed services and the Socialist Programme Party had fighting on the one ticket. He was promptly rewarded by reelection for other four years.

Today it is the President dominates the armed forces which the civilian scene. is a strange blend of allied rule coupled with East European-style mass meetings. But Burma's alluring Buddhism makes a game singularly without gical fervour.

Richard

Frozen Assets.

Winter just wouldn't be the same without ice. Nor would Martini Dry.

Because ice enhances the clean, subtle taste of Martini's unique blend of fine herbs and wines. Ice and Martini simply belong together. And we'll drink to that.

MARTINI

Extra Dry. The right one just by itself.

John Foore

plant and machinery value

§ Forward bargains are permitted on two previous days

هكذا من الأضليل

BY THE FINANCIAL EDITOR

Barclays leads the way

Deeper overdrafts have been on the cards for at least a fortnight now and yesterday Barclays broke ranks and pushed its base rate up by one and a half points to 11.5 per cent. Presumably, the clearers would have been happier had the Bank of England taken the initiative and raised MLR at lunch-time yesterday. But once it had become clear that the authorities were fully prepared to leave the public glory for raising interest rates exclusively to the clearers, then the clearers really had little choice but to go it alone—the only remaining question being as to whether the other clearers will feel the need to push their rates up quite as steeply as Barclays.

The problem for the clearers, of course, has been that 10 per cent base rates have fallen well behind money market levels since early October, the latter having been pushed up by a combination of strong credit demand and anxieties over both the domestic and American economies. As a result, borrowers who had previously found it relatively attractive to borrow in the money markets have been rapidly moving back to the banks to take up their overdraft facilities.

For the banks this has meant not only that they have been taking on business that has been extremely costly to finance but also that they have been in danger of exceeding their "corset" limits—the next key date being Wednesday week, the November banking month make-up day. A rise in base rates should slow some of the flow back towards the banks—as well as putting an end to any round-tripping that may have been going on—but the fact remains that bank lending is likely to be on a seasonal upturn over the coming weeks and that the underlying strength of credit demand that failed to show up in recent money supply figures may well start to show up very much more strongly from now on.

As far as the general level of interest rates goes, money market rates did not in fact lurch all that much more yesterday. Clearly, however, the situation remains delicately balanced. Further rises in United States or the wheeling of monetary policy to the front of the stage in the face of "excessive" wage awards could still push domestic rates higher still—and if that were to happen MLR would probably have to go 2 rather than 11 per cent.

uromarkets

Coming to terms with the dollar

Common with foreign exchange markets, uromarkets have been a much quieter time yesterday after the confusion caused by the previous day's package to salvage the dollar. Impeded by the steadiness of the dollar, redollar interest rates eased slightly after Wednesday's sharp rises in the increase in US interest rates, though it was noticeable that the improvement was concentrated at the short-end with longer maturities less affected, reflecting the market's concern about whether the dollar can hold onto these levels six months to a year ahead.

The easier tone of the Eurodollar market seems to underline that there is relatively little concern that the US measures impose extra reserve requirements on domestic banks for large time deposits would encourage US banks to fund their requirements in the Eurocurrency markets. However, the reported easing of these lines yesterday and the feeling that the New York and Eurocurrency markets are now so integrated that arbitrage opportunities are much more limited than in 1971. Then Regulation Q prohibited the banks paying the going rate of interest and as a result some \$14,000m was attracted from Europe in double-quick time.

Eurobond markets continued to see a stalling turnover although in many cases movements did not reflect the size of the moves which were for the most part small. However, there were still some orders for large buying orders since with holdings run down to a minimum no was prepared to get caught should the rate go astray. But at least dollar bonds were held on to their almost 2 point rise of the previous day and with elevated bonds yielding almost 10 per cent in many cases institutional investors,

including many London funds, are starting to get attracted at these levels which may just bring to an end the extended bear market in Eurobonds for most of this year.

George Wimpey Just like Costain

On the heels of Costain, George Wimpey has also opted for the holding company route to dividend freedom and potentially a better stock market rating.

Unlike Costain, however, Wimpey kept its dividend intentions somewhat vague yesterday and provided no helpful news about current trading. As a result the shares after an initial 6p mark-up fell back under selling pressure to close just 1p up on the day at 81p.

In a market, still smarting over Wimpey's extremely disappointing interim results—profits down 17 per cent to £14.5m—this reaction was predictable. Indeed, the only real beneficiary of Wimpey's announcement seemed to be Taylor Woodrow which rose 10p to 410p on hopes that it will follow suit soon, despite denials.

Wimpey was at pains to point out that the reconstruction had been under consideration for two years and that higher dividends and any nationalization barricades created as a result were merely spin-off benefits.

As a result of the interim news market forecasts for Wimpey's full-year have been cut back by as much as £10m for a profits total similar to that of last year's £52m. But the group has already promised total pay-



Mr Reginald B. Smith, chairman of Wimpey

ments of at least 2.27p net next year and on the basis of last year's 14 times cover, could comfortably treble the historic payment to 3p net.

This suggests a yield of around 5 1/2 per cent—a point above the sector average—and makes the shares seem relatively attractive.

Hoover Margins take the pressure

Hoover is still missing out on the consumer spending boom. July and August industry figures show vacuum cleaner deliveries up by 17 per cent and washing machines up by 30 per cent, yet Hoover's third quarter profits are down from £0.95m to £0.3m, and the problem is not sales, which were up by 19 per cent in the third quarter, but in margins, which were 2.7 per cent over the nine months against 7.2 per cent last year.

The relentless progress of Italian imports is forcing Hoover to push its promotion costs still higher. But the fact is that, in washing machines where foreign penetration is now over 50 per cent, it has found itself in a marketing limbo. Its products are too expensive to compete with the Italians and too cheap to compete with the up-market German models.

Hoover is still seeing some hopeful signs and a recent 5 per cent price increase will help. But profits of £8.5m for the full year, compared with £12.2m last year, appear to be the best that Hoover can manage.

In the longer term, though, Hoover will have to sort out its marketing position unless the consumer downturn is to increase the pressure even further, and its talks with the Government to try and restrict foreign imports are no more than a temporary palliative. All of which leaves the shares resting uneasily on the 8.4 per cent yield at 266p.

Washington, November 2
Mr Michael Blumenthal, the United States Secretary of the Treasury, is delighted at the reaction to the Administration's measure to help the dollar.

He disagreed strongly with the opinion of some economists that the decision to tighten monetary policies sharply and raise \$30,000m of foreign currencies will cause a recession next year.

"As well as we can predict, we see no reason for a recession next year as defined by two consecutive quarters of decline in real gross national product," he said today. He still hopes that the real growth rate will be about 3 per cent. "Our economy is strong and healthy... there are no major distortions."

The Administration has, he says, attacked and will continue to attack all the problems that have caused concern about America's economic prospects.

There was "no rhyme or reason" to the sharp recent decline in the dollar's value which was out of all proportion to economic fundamentals. The latest measures could break "the strange psychological climate" that had dominated financial markets.

According to informed sources the Treasury Secretary was angry that the dollar started falling heavily in the currency markets even before the automated office of the anti-inflation speech last week, suggesting that the markets had written off the programme without looking at the details.

The Secretary said it was a long time ago that the dollar was the new policy would be a concerted and forceful attack on and monetary policies, but the markets did not listen.

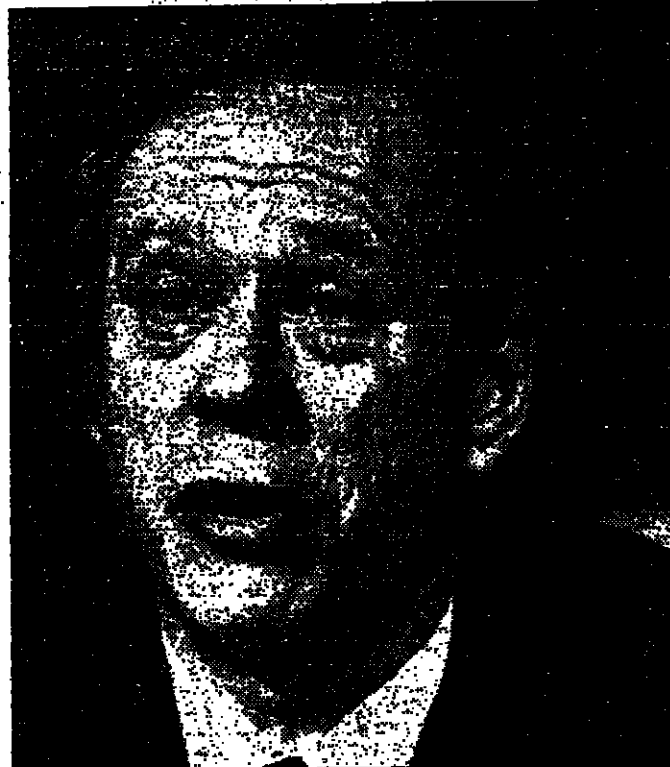
It was this reaction in the markets that convinced Mr Blumenthal that President Carter had to take still bolder actions to demonstrate his unswerving commitment to curbing inflation. The result was a one percentage point rise in the discount rate, the largest since the early 1930s, accompanied by the imposition of tough bank reserve requirements and the currency measures.

Mr Blumenthal is reported to have told people that "the President had to show he is willing to bite the bullet." He has pointed out to visitors in recent days that not only does the United States now have a monetary policy that will curb the money supply growth rate, but it is also moving towards fixing a budget that will involve the smallest deficit, as measured in terms of gross national product, of any major industrial nation.

The next 60 days are going to see a crucial series of top White House budget meetings, and the first detailed session was held by the President last week.

The result, the Administration says, will be a deficit of \$30,000m or less, which informed sources say will involve cutting the current services budget between \$15,000m and \$20,000m.

Currency markets could possibly continue to be a source of periodic difficulty for the Americans in view of the estimated \$500,000m of United States currency held overseas. It is believed that the Treasury Secretary sees no short-term solution to this problem, and that he is convinced that the



Mr Michael Blumenthal: delighted by the market's reaction.

dollar will remain the world's principal reserve asset.

However, sources close to the Secretary suggest that he now favours a gradual diversification of reserve assets by foreign central banks that over coming years will see a reduced role for the dollar.

Further, he is hopeful that the development of a European Monetary System will contribute to this diversification process and that the Europeans, as a result, will share some of the burden with the United States of managing key reserves assets.

He does not have particularly strong views on the role of gold in the monetary system. He does not believe that gold's role should be strengthened, but accepts that it still plays an important role in the reserves of most nations and that this role will not be eliminated.

The determined efforts that have been made to curb inflation and strengthen the dollar may have some beneficial effects on the climate of negotiations concerning world trade liberalization.

Mr Blumenthal is confident that other countries will not allow Congress's recent failure to extend the President's authority to waive the automatic imposition of countervailing duties to stop completion of the negotiations this year under the General Agreement on Tariffs and Trade.

Mr Blumenthal says unequivocally that the Administration will do everything possible to ensure that Congress extends the waiver authority when it convenes on January 15. "We see very good chances for congressional approval of this... we are committed to get congressional approval as the first order of business" in January, he said.

The Secretary will meet leaders of Middle East oil-producing countries in two weeks' time. He believes that these leaders are aware that any oil price rises could affect the fragility of the currency markets and of global economic recovery, and that it is in the best interests of oil producers to use extreme caution on this matter.

It seems likely that Mr Blumenthal will try to exploit the latest Administration currency moves to convince the oil producers that the United States is concerned that their vast dollar holdings should appreciate in value.

Sources close to him suggest that the Secretary is aware that this point will also influence oil producers to show moderation in raising prices.

Technology

Crucial questions for the Post Office

The corporation must decide where to draw two key boundaries: that of its own monopoly and that of the wider field within which it will offer equipment and services in competition with private suppliers.

Computing and telecommunications, it has frequently been noted in recent years, are converging, opening up new possibilities for the electronic age of the 1980s. But already the pace of this convergence is such that a number of key questions are now confronting the Post Office: how should it react to the new technology; what services should it offer; what services and products should it allow other organizations to offer?

The corporation's telecommunications services continue to set new records, but the pattern is changing and these doubts will have to be resolved soon.

Some of the questions were aired recently at a conference on Post Office telecommunications organized in London by ISL Information Studies. Before the game is changing, was the warning from one speaker: after a generation of steady, unsurprising evolution of telephones and telegraph services (plus a recent explosion in data transmission) we are now entering a phase of revolution.

A profusion of new services, now being tested in the far corners of the new United States policy of free competition in telecommunications, will challenge a whole series of fundamental policies and managerial decisions. The Post Office itself has listed the new telecommunications services as provided in 1970 and envisaged for the years 1985 and 2000.

In 1970 there were six: telephony, telegraphy, telex, facsimile, data services and radiophony. By 1985 there will be a further nine: radiophony, confabration (conference television), videophone, videodata (the radio transmission of measurement), the electronic (remote control of machines), "super telex" and enhanced data.

By the year 2000, these 15 services will have grown into

18 with the addition of "telex-mail", home newspapers and colour facsimile. And virtually all of these 18 will contain a range of specialized sub-services.

It is the area of data communications—using the fast, digital coding of the computer rather than the traditional analogue, voice-modulated telephony—that is stimulating new applications and services. As an example, how should the Post Office react to the present state of word-processing as they develop to embrace transmission from one place to another by setting up a new service or using existing ones?

Can the Post Office afford to ponder to each new application, with the inherent problem of dissipating effort and resources? asked Mr J. J. Souleby of RCA Global Communications. How can they meet their statutory commitments yet at the same time encompass the variety of needs that are being generated each succeeding year?

In the United States there are more than 1,700 private telephone companies, of which over 80 per cent are Bell Telephone subsidiaries. On top of this are the new generation of "value-added network" companies which are being formed to exploit new technology and applications such as the electronic transmission of data, pictures and text.

They include such names as

American Satellite Corporation, Telenet, Tymnet, Graphnet and Satellite Business Systems. Some companies provide total services as a package and there are also third-party companies which arrange the most effective mix of services for business users.

In some respects the trends in technology are moving in different directions—one way pointing to a proliferation of separate facilities and the other to an integrated system such as the Post Office's System X for the future. Going the System X route, and introducing new features as add-on elements to a unified transmission and switching "workhorse" system would reverse the traditional trend to have different systems for each of the basic services—such as telephony, telex and data communications.

The potent combination of the declining cost of computing and the accuracy, flexibility and new possibilities of digital switching and transmission is already producing a new range of practical systems. These include electronic mail, videodata, public information systems (such as the Post Office's Prestel), which link telephone and television; electronic funds transfer; and communications in word-processing. Many more are on the horizon.

The very pace of technological change in this area presents the Post Office with a serious

problem—how to assess the adoption of a new application and weight it against existing investment and services.

Is it better to develop the technology up to a point at which the design is frozen and a firm commitment made; or to design for change, with the risk that the system becomes a succession of interconnected advances and inevitable compromises? If the former, at what point should the development stop and the commitment be made?

"In the United States the succession of advances are exploited by competing companies," Mr Souleby noted, "which means that if the race becomes too fast, or a promising application is superseded, then the company can fall by the wayside."

As Mr Michael Tyler, of Communications Studies and Planning, pointed out, the challenge posed to the Post Office by the new technologies of office systems is severe. The corporation must decide just where it will draw two key boundaries—that of its own monopoly and that of the wider field within which it will offer equipment and services peripheral to its main network in competition with private suppliers.

The Post Office's policies towards the approval of terminal equipment for attachment either

to the public switched telephone network or to private circuits, traditionally conservative, are already being questioned and attacked.

How far, for example, will the Post Office seek to extend to electronic office systems its traditional insistence on carrying out its own maintenance on all equipment attached to the public network? (Post Office engineers now maintain computer-controlled private automatic branch exchange systems at the pioneering IBM 3730). What role will the Post Office seek in the office systems market?

Will it aim to provide complete value-added services on the American pattern—or limit itself to providing simply a basic network?

If the corporation were not to offer complete electronic office services, it would undoubtedly feel the keen edge of competition from those who did (estimates show that communicating word-processing typewriters in the 1980s will be much cheaper than first-class mail and very much cheaper than telex). But, equally certainly, any attempt to extend the Post Office monopoly comprehensively into the electronic office area would be strongly resisted.

Perhaps the corporation will seek a selective competitive position in the new markets, concentrating on those areas where it can obtain a comparative advantage.

One possibility would be an extension of the videodata/Prestel concept to provide not only information retrieval services but also simple business and financial computing and text-related office services. Here the market could be the mass of smaller businesses which might not be early customers for the "office of the future" systems from the computer and office-equipment companies.

Kenneth Owen

Business Diary: Mole wrench • Sir Y-K anchors away

Department of Transport officials have finally managed to get their Channel Tunnel "mole" out of the digging time when the tunneling press in a short stretch of tunnel near Dover was first reported in Business Diary nine days ago.

A proud new owner of the tunnel, which cost £500,000 in 1974, is the London merchant Ron Mardell, learnt this week that his £19,737 had been paid.

Mardell broke off from a job on the Channel Tunnel to sell his Diary that he hopes to a few bob out of acquittal. He's still confident it can be a useful piece of property. Perhaps the Channel tunnel, who knows? But he is being built all over again.

His visit to the palace yesterday morning followed a champagne reception to celebrate the arrival at St Katharine's dock of a 70-year-old West Country topsail schooner, the Kathleen and May.

What, you may wonder is the connection between Sir Yue-Kong and an old West Country sailing ship? The shipowner is a vice president of the Maritime Trust (patron of the Duke of Edinburgh) established in 1969 to do for historic ships what the National Trust does for historic buildings.

Sir Yue-Kong subscribed around £150,000 to enable the vessel to be restored to her original condition the year after the trust was established. Since 1971 she has been berthed at Plymouth but will now be permanently berthed by Tower Bridge.

Ken Warner, the new arrival on the board of Grindlays

ship for its fleet which now totals close on 19 million tons deadweight.

Alas, the order has not gone in British shipbuilders which, like most shipbuilders these days needs very deal it can get, but to Brazil. It represents a considerable coup for the Brazilian shipbuilding industry, now a big force in the world market. The shipowner is a vice president of the Maritime Trust (patron of the Duke of Edinburgh) established in 1969 to do for historic ships what the National Trust does for historic buildings.

Sir Yue-Kong founded his huge shipping empire in 1953 with one second hand ship since with the former Shanghai banker has built his group into one of the world's most powerful shipping corporations.

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Ken Warner, the new arrival on the board of Grindlays



This Womble (left), the Incredible Hulk, the Pink Panther and Hong Kong Poo, are among the "characters" discussed at a Character Merchandising Conference in London yesterday. Glen Smith, who runs a company called Character Building which specialises in cold baths but in advising firms on how to use cartoon and film characters as marketing aids, was to have revealed the results of a survey showing the 50 characters most popular with children. Unfortunately, delays with the computer processing—the work, perhaps, of a character called the Gremelin—meant there will be no details until next week. His lunch, however, is that two film franchise stars of the Jules Verne story of the Jules Grease and Saturday Night Fever, and Ruby, the bird who promotes Post Office Telephones.

Bank, is one of the bank's old India hands. After 34 years as the doyen of foreign bankers in India, Warner, a Cornishman originally, has finally forsaken Bombay for the City.

In many ways the change will not be so startling. After all, in many ways Bombay is the "City of India"—as opposed to New Delhi's Whitehall. And after years of being in the office in Bombay, Warner is

In fact, his dream is a long way from being realized at the moment, and foreign banks in India have been facing restrictions from the present Janata government.

Some foreign bankers, as a result are very disillusioned and complained of being reduced to "boutique bankers". But not Warner. While he was in India he accepted that foreign banks had to share in India's experiment to extend economic democracy through the banking system.

According to Joe Bowden of Wild Well Control of Texas it is only a matter of time before there is another oil blow-out in the North Sea: "Blow-outs," he says, "are far more likely in the production stage than during drilling and more and more production is starting up."

When the first ever North Sea blow-out happened on the Ekofisk field in the Norwegian sector it was the Norwegian team led by Red Adair—a man more like John Wayne than Wayne himself—which was called in. Bowden wants some of the next action.

However, he is linking up with a British private company, Furmanite International. Furmanite has made a name for itself through a system of sealing leaks in pressure pipes without any need to interrupt production.

It takes 15 hours to get equipment in from the United States," Joe Bowden says. "With the link with Furmanite the equipment will already be in this country."

Ross Davies

electrocomponents limited

INTERIM STATEMENT

The results for the half year to 30 September 1978 are:—	Half Year to 30 Sept. 78 (unaudited) £000's	Half Year to 30 Sept. 77 (unaudited) £000's	Full Year to 31 March 78 (audited) £000's
External sales	20,717	15,225	33,556
Profit before taxation	4,511	3,258	7,596
Corporation tax	2,180	1,396	3,256
Profit after taxation	2,331	1,862	4,340

* Adjusted to reflect the change in Group accounting policy of Deferred Taxation.

TRADING RESULTS AND PROSPECTS

Sales for the first half of the current year have increased by 36.1% over the similar period in the previous year, with a corresponding increase in pre-tax profit of 38.5%. The Board's policy of widening product ranges in the Group's distribution companies has continued without adversely affecting the quality of customer service. This policy has contributed to the maintenance of steady growth.

Dorset, the Group's smallest subsidiary, continues to be a cause for concern, but Reading Windings now appears to be set on a profitable course. The indications are that our newest subsidiary, Electrospares, will make a contribution to Group profit in its first full trading year.

The Board is confident that the full year's results will continue to reflect satisfactory progress.

DIVIDEND

At a Board Meeting held on 2nd November 1978 the Directors declared an interim dividend of 1.5p per ordinary share on the capital as recently increased by the one for one scrip issue. This dividend will absorb £300,000. The 1977 interim dividend of 2.4p per share on the then issued share capital absorbed £240,000. Dividend warrants will be posted on 5th January 1979 to members on the register at 8th December 1978.

Britain's biggest electronic components distributor

مكتبة الركن

FINANCIAL NEWS AND MARKET REPORTS

Stock markets

Prices slide on news of dearer money

Deeper money worries and the unsettled outlook on the pay front combined to send equity prices sliding yesterday and the stock market slumped lower throughout the session.

Although the minimum Lending Rate was unchanged at 10 per cent, the market is already discounting higher interest rates. With Barclays Bank already increasing its base rates and the other High Street lenders expected to follow suit, some are predicting that MLR will touch 12 per cent before it peaks and turns back.

The sharp rise in share prices on Wednesday afternoon saw follow-through yesterday morning and the FT Ordinary share index fell over seven points in official trading. However prices steadied in afternoon and by the close the index at 472.4 was 6.8 down on the day.

Allied Breweries shed a 1p to 81p yesterday on thoughts that there is a limit of some two million shares overhanging the market at 83p. Although jobbers are generally prepared to make a price in 100,000 shares there seem to be few takers for such a large lump of stock.

City opinion on which way the market will turn next is split between the bulls and the bears and most market men keep their positions short.

In gilt shorts had a volatile day dipping five sixteenths in the morning before improving slightly to end a quarter off the day.

At the longer-end, jobbers put a wide quote on prices to prevent a costly wrong footing. However, after losing half a point the session, most stocks recovered to end at previous overnight prices.

In equities, leader stocks ended the day at lower levels. GEC was one of the hardest hit

tumbling 9p to 310p while Fisons at 317p lost 6p and Becton shed 7p to 635p. ICI eased a penny to 360p, Boots slipped 2p to 189p while 4p falls left Unilever at 526p and Metal Box at 310p. Tubes was unchanged on the day that 37p, while Cadbury-Schweppes shaded 1p to 55p.

BATS, where some 500,000 shares were placed on Wednesday at around 265p tumbled 8p to equal that price, while P & O held steady at 86p. It is thought that a line of these shares, on offer at above the market price, has been withdrawn.

The troubles in the motor industry wiped 6p off Lucas at 305p while BOC slipped a penny to 67p on the possibility of industrial action by the workers.

Dowty was unsettled by a report of the large failure rate of mining equipment and fell 7p to 256p.

Third quarter figures below market estimates left Hoover 14p down at 266p while Electrocomponents tumbled 15p to 270p on its trading news.

United City Merchants, reporting full year figures, fared little better shedding 6p to 57p while George M Callender at 23p and

Tern Consulate at 78p, unveiling a rights issue with its results, lost a penny or two. By contrast Mallinson Denny put on a penny to 51p.

A corporate re-organisation at Wimpey designed to increase the dividend boosted the shares 8p to 88p at one stage, though by the close the price had fallen back to 81p. Taylor Woodrow climbed 10p to 410p on hopes that it will be next while Richard Costain ended the day 8p higher at 232p. Laing Property shed 3p to 113p while Laing Construction eased 1p to 75p.

In a firm banking sector Barclays held steady at 356p despite the interest rate improvement while National Westminster added 2p to 270p. Midland at 340p and Lloyds at 252p were also unchanged on the day.

Properties weathered the deeper money fears without too much of a down turn. MEPC at 136p and Great Portland Estates reporting next week, at 208p were unchanged while Peachey slipped 1p to 80p. Land Securities, however slipped 3p to 226p.

An improved dollar premium pumped some life into overseas stocks. Philips Lamps at 890p climbed 36p while Unilever NV firmed almost £1, to £24 11/16. Col shares, however, caught the pull of the

premium and the push of the lower bullion price ended the day with slight gains. Recovering from the drubbing of the previous session, East African added 36p to 390p. West Deacons firmed 3p to £19 13/16 and Libanon climbed 34p to 462p.

Interim figures next Thursday from Allnet London Properties could provide a good buying opportunity, say brokers Gallows & Pearson. First half results are normally poor, compared with the year as a whole and the broker's see the shares, currently at 216p, as a buy at slightly lower levels.

Chairman's statements in the annual reports received a mixed reception with Grimshawe Holdings firmed 2p to 55p and MFL equity turnover on November 1 was £35.82m (16,240 barges). Active stocks yesterday, according to Exchange Telegraph, were BATS, ICI, George Wimpey, Shell, BAT, GEC, Becton, Marks & Spencer, BP, EMI, Land Met, Reckitt, Colman, Beers, di, Distiller, Imperial, Recal, Reed Int, THF and Barclays.

Latest results

Company	Sales	Profits	Earnings	Div	Pay	Year's
£m	£m	per share	pence	date	total	
A. Child & Sons (1)	1.1(0.98)	0.02(0.002)	(—)	(—)	(—)	(—)
G. M. Callender (1)	2.8(2.5)	0.18(0.24)	1.4(1.7)	0.60(0.60)	(—)	(—)
Electra (1)	(—)	2.3(1.9)	2.0(1.5)	2.0(1.5)	31/1/79	(—)
Electrocomponents (1)	20.7(15.2)	4.5(3.2)	1.5(1.4)	3/1/79	(—)	(—)
A. R. Findlay (1)	6.5(5.5)	0.25(0.17)	0.81(0.27)	18/12	(—)	(—)
T. G. Henderson (1)	11.5(9.0)	1.7(1.5)	1.7(1.5)	11/12	(—)	(—)
Hoover (1)	149.5(141.1)	4.1(3.6)	1.25(1.25)	5/1/79	(—)	(—)
Mallinson Denny (1)	103.6(96.5)	4.7(4.6)	6.5(5.19)	1/12	(—)	(—)
New Turogum T (1)	(—)	0.50(0.45)	(—)	(—)	(—)	(—)
Save & Prosper (F)	(—)	(—)	(—)	(—)	(—)	(—)
Sungel Bahry (F)	0.76(0.68)	0.12(0.15)	2.19(2.73)	18/12	20/1/84	(—)
Utd City Merch (F)	148.4(165.4)	2.7(4.0)	0.38(0.38)	(—)	0.83(0.83)	(—)
Utd King Prop (1)	(—)	0.42(0.23)	(—)	(—)	(—)	(—)
Wemyss Invest (F)	(—)	0.50(0.64)	(—)	7.56(7.5)	6/1/31	12.5(10.7)

Dividends in this table are shown net of tax on pence per share. Elsewhere in Business News dividends are shown on a gross basis. To establish gross multiply the net dividend by 1.49. Profits are shown pre-tax and earnings are net. a=9 months.

Electrocomponents widens its margins to rise 32pc to £4.5m

By Peter Wainwright
Electrocomponents, the mail order business with a difference—the catalogue for its electronic and electronic components and instruments goes mainly to industrial users—again widened its margins in the six months to September 30.

Britain's biggest electronic components distributor raised sales by 36 per cent to £20.7m and pre-tax profits went ahead by 38 per cent to £4.5m.

In the year to last March pre-tax profits rose by 67.4 per cent (to £7.5m) on sales up 46.9 per cent. This indicates a slackening in sheet growth but as the figures for sales and profits grow bigger, this is only to be expected.

However the widening in margins is temporary. This year the catalogue is coming out every six months rather than the original four months and the benefits to margins in one half-year could well be cancelled out in the second half year.

The directors report that the policy of widening product ranges in the distribution companies has continued. The main offshoot, RS Components, prides itself on stocking everything its users want on a 24 hour delivery. Its customer service has been maintained.

Dorset, the smallest subsidiary, supplying through mail order the amateur market is still a worry. But Reading Windings

seems set to make money and the signs point to Electro spares contributing to profits in its first full trading year. For the full year "satisfactory progress" is foreseen.

The interim dividend rises from 1.2p net to 1.5p net or 2.24p gross (allowing for a one for one scrip issue). The new payment absorbs only £300,000 from profits after tax of £2.33m.

Electro thinks that its policy of concentrating on distribution is paying off with manufacturers inclining to specialise in making and leaving the marketing to specialists with a reputation for stocking comprehensive ranges. The market greeted the figures by marking down the shares 15p to 270p.

Davies & Newman fix hopes second-half

The overall upturn of its aircraft fleet during the last peak period has once again resulted in another seasonal half-time loss at Davies & Newman.

Pre-tax losses of the group for the six months to June 30 have increased from last year's figure of £976,000 to £1.2m. Turnover of the shipbroker and airline operator increased from £40.2m to £50.1m.

An interim dividend of 4.05p gross has been declared compared with 3.7p for the corresponding period. While the group might have expected a higher dividend, the total dividend by more than the statutory 10 per cent, it said this would depend on the profits decline at the end of the year.

Commenting on the second half Mr Frederick Newman, chairman, said based on results to date it seems likely that, in spite of some difficulty caused by the French air traffic controllers "work to rule", the profit for the year should be at a much more satisfactory level than in 1977. Profits first year of the shipbroker and airline operator increased from £40.2m to £50.1m.

The seasonal loss was much in line with most market

Tern 'rights' to fund knitwear acquisition

Tern Consulate, the shirt and tie manufacturer and distributor, is making a one-for-two rights issue at 62p a share to raise £434,000 which will fund the acquisition of a private knitwear company, Robert Charles. This year's total gross dividend is expected to increase by 84 per cent.

The issue gives an 18p discount on the overnight price, which fell 7p to 78p following the announcement, and the group's interim results.

Pre-tax profits increased by 55 per cent to £102,000 and the interim dividend has been increased fourfold to 2.6p gross as a result of the rights issue. It has already received Treasury approval.

The group, which trades under brand names which include Inigo Jones and Panache, will use £211,000 from the issue for the acquisition consideration. Tern has also agreed to repay to the Robert Charles directors their £35,000 loan accounts, making a total of £246,000.

The remainder of the funds will be used to develop the shirt division as well as the Robert Charles, and reduce borrowings. Turnover for the six months to June 30 increased by only 7 per cent to £2m as it suffered from import restrictions in some overseas markets including Nigeria and Afghanistan. Mr Peter Barden, chairman, said the turnover results, although expected, had also been hit by a poor summer as well as decline in business from Middle East customers, although overall gross margins had improved during the year with a reduction in overheads.

The final dividend is expected to double to 5.37p gross.

Mallinson on the way back but prices low and margins stay thin

By Rosemary Unsworth

Mallinson-Denny, the international timber group headed by Sir Frederick Catherwood, has managed to weather the storms which have afflicted the British timber industry in the last year to produce a small profit increase at the interim stage.

The group made £4.75m in the half year to June 30 compared with £4.65m the previous year, indicating that the group is returning to profit growth after the downturn of 1977.

Sales increased by 7 per cent to £103.6m, and the board said that United Kingdom volume performance has been "very satisfactory" with an apparent increase in market share, but it stressed that prices were depressed and margins thin, particularly in the softwood sector which forms the bulk of Mallinson's business.

Mr Thomas Macpherson, deputy chairman and managing director, pointed out that the tightening up of margins had been started at the end of last year when supply outstripped demand. However, price increases during the year have helped to restore margins and Mallinson-Denny is expecting a strong first quarter of 1979.

The group's overseas results reflected difficult market conditions in France and Australia where the construction industry had ash and decline. In Australia building was cut by half, although the company there is now back in profit. The French losses, as Sir Frederick



Sir Frederick Catherwood, chairman of Mallinson-Denny.

pointed out in his last annual statement will continue into next year, although the first half losses will be greater than those in the second.

Other overseas markets, including the United States and Thailand, show signs of an upturn which will contribute to next year's first half results. The interim dividend has been maintained at 1.86p gross but the board intends to raise the final by 10 per cent, to 2.05p gross.

The Stock Market reacted to the results by pushing the share price up 1p to 51p, and market estimates are for pre-tax profits of around £10.5m for 1978.

Andrew R Findlay pre-tax jumps 48pc in first half

Andrew R Findlay Group's pre-tax profit jumped by 48 per cent to £252,000 in the six months to June 30, 1978 after a loss incurred by a new distribution company in Manchester which amounted to £24,000.

The company is also proposing a one-for-ten rights issue of 600,000 preference shares to raise £800,000 for the growth and expansion of the business. The shares, which may be converted between 1982 and 1991, will be at 48p. Equity Capital of Industry, which is underwriting the issue, will eventually obtain at least a 15 per cent holding in Findlay following the renunciation of rights by some of the directors.

A 12 per cent increase in the interim dividend has been declared and the board said that the Manchester company is expected to make a contribution to profits in the next few months. Last year Findlay's pre-tax profit was £171,000.

Harrisons & Crosfield buys Henderson Hogg

Harrisons & Crosfield has agreed to acquire the whole of the share capital of Henderson Hogg for a consideration of £534,000. Henderson Hogg is in chemicals and industrial textiles.

This will be satisfied by the issue of 77,000 ordinary shares of Harrisons & Crosfield as fully paid at a price of £5.50, plus £10,000 in cash.

Earlier this year H & C gained control of Harrisons Malaysian Estates with a bid valued at £120m.

McLeod Russel now in drop forgings

McLeod Russel, the plantations holding group, has acquired a controlling interest in a private company, Arthur Edge, specialising in drop forgings. McLeod has paid 90p a share for 711,000 ordinary shares representing 50.8 per cent of the issued share capital.

Pre-tax profits of Birmingham-based Edge, for the year to March 31 were £407,000, at which date shareholders funds before deduction of a deferred tax provision of £380,000 amounted to £1.1m.

Booker McConnell in pharmaceutical deal

Booker McConnell has acquired from Saltrac the share capital of J. D. Jenkins for a cash sum of £500,000. The exact figure being dependent on

accounts presently being prepared up to date of sale.

J. D. Jenkins has a turnover of £1.5m and operates 13 retail pharmacies in London and south-east England. These pharmacies will be added to the 91 retail pharmacies already operated by Booker Pharmaceuticals, and which trade as Kingswood Chemists. Booker Pharmaceuticals will thus operate over 100 retail outlets. J. D. Jenkins shops will trade under the Kingswood name.

Lonsdale Universal withdrawals

The boards of Lonsdale Universal and Midland Educational states that as a result of the recommended offers by Alfred Freedy & Sons for the ordinary and preference capital of Midland Educational, Lonsdale intends with the permission of the Takeover Panel to allow its proposed offers for Midland Educational to lapse when the offers by Freedy, or any other higher offers by another bidder are posted.

Inco sees nickel demand unchanged

Inco sees label nickel demand unchanged. Inco's chairman, Mr J. Edwin Carter said in Toronto that worldwide demand for nickel in 1979 will be "in the same order of magnitude as in the current year".

The outlook for nickel prices was uncertain and the direction of prices in 1979 would depend to some extent on the trends in producer countries. Worldwide demand for nickel has been encouraging in 1978, he said, particularly as a consequence of strong stainless steel production which will be as high as, and may exceed, the record year of 1974.

Asset acquisition totalled £1.837m

The net acquisition of assets by the long-term investing in the insurance companies situations—the long-term funds and the pension funds—totalled £1.837m in the April-June quarter, according to the October edition of Financial Statistics. This means that the acquisition of assets by the two groups in the first half of the year was some 30 per cent up on the same period of 1977—the lion's share of the increase being recorded by the long-term funds in the second quarter fell only of the insurance companies.

Total holdings of liquid assets marginally. Gills remained in

Upturn in housing starts spu Henderso

By Michael Clark
An upturn in new starts and industrial action work in the United Kingdom has meant a half-time profits for Henderson.

Pre-tax profits of the group, which has increased by 59 per cent to £718,000 over also rose from £11.6m. Earnings a share 7.0p against 4.4p.

An interim dividend has been declared at 2.3p for the period. Mr Patrick Gwynne, chairman of the group, said the group was experiencing an improvement in sales and a build up of capacity, as has been the pattern in the sector. If this is maintained it will prove net margins which slipped this time from 10.2 per cent.

The bulk of the increase from the group operations, where so much improvement was seen in the UK industrial and construction sectors, has begun to filter through. However, the picture somewhat, with German operations and subsidiaries have not met expectations.

Confirmation of the figures helped push the share price up 4p yesterday to 93p.

favour with the long-term funds making up £270,000 and the pension funds of £442m. In company security rather lower than in quarter.

Amalgamated Stores' deals

Details of some deals were released by Amalgamated Stores bought a 56-year-old interest in 1/4 Y. Place, London, for £300, and the freehold of King's Road, Chelms £44,000 each.

It has also sold its 80 C.E.C. for £750,000 cash. Gross assets of Amalgamated Stores rose by £1.2m at re-living in 1977, while net assets have risen against 23p.

CROSBY HOUSE GRP (London: 100 shares at 120p) Co of Jersey now has 1,210,750 ordinary shares (sent).

Shiloh's boost from wider range

Diversification has for Shiloh Spinners, cashmere textiles plant in the half-year to 0 profits jumped from £143,000. This was because of higher earnings subsidiaries engaged in factoring and merchant banking and protective services.

Mr Edmund Gari chairman, explained over in spinning was down 10 per cent, but group has fallen by only 2 (to £3.76m), because their contribution of 1.1m.

This report correct of yesterday, which contained figures.

Mr Gartsdale point Shiloh's profits recovery recession levels does a general improvement in spinning sector, which is depressed.

Prospects in the sector remain uncertain. There has been a movement in the spinning recovery forecast for the autumn materialized.

As Mr Thomas Macpherson chairman and managing director of Mallinson-Denny, another merger during the 1970s.

"There are hundreds of mergers during the 1970s. Timber Trade Federation is quoted as saying that the time for gobbling up the private sector is over. They start seriously on each other with business and waiting for the latest price of wood, which sets the pace for the world, to be announced."

Rosemary

Barclays Bank Base Rate

Barclays Bank Limited and Barclays Bank International Limited announce that with effect from the close of business on 3rd November, 1978, their Base Rate will be increased from 10% to 11 1/2% per annum.

The basic interest rate for deposits will be increased from 7% to 9% per annum.

The new rate applies also to Barclays Bank Trust Company Limited



BARCLAYS

Reg. Office: 54 Lombard Street, EC3P 3AH Reg. No's 40839, 90680 and 706167.



BANK OF SCOTLAND

BASE RATE

The Bank of Scotland intimates that, as from 3rd NOVEMBER, 1978, and until further notice, its Base Rate will be increased from 10% PER ANNUM to 11 1/2% PER ANNUM.

LONDON OFFICES—DEPOSITS

The rate of interest on sums lodged for a minimum period of seven days will be 9% PER ANNUM, also with effect from 3rd NOVEMBER.

Grimshawe move on bank debt

By Bryan Appleyard

Grimshawe Holdings has arranged a major restructuring scheme to deal with its £17.5m of debt with the Midland Bank.

Mr Thomas Kenny, the chairman, described the scheme at yesterday's annual meeting in Leeds, pointing out that the scheme until the company was earning profits. In the year to April 30 Grimshawe turned round from a £38,600 loss to a £28,500 profit.

More Financial News on page 30

The scheme involves transferring all the company's properties to a new company, Grimshawe Securities, a wholly-owned subsidiary which ceased trading on June 30, 1978. The investments and loans of £263,000 shown in the last balance sheet have already been transferred and these will comprise the assets of the subsidiary.

The book value of these assets will be matched by an overdraft and the parent company's indebtedness will be reduced by that amount. Then the Midland will appoint a receiver to Grimshawe Securities and all its liabilities and trading results will be excluded from the parent company balance sheet.

Any losses in the subsidiary will be borne up to the first £500,000 by the Midland and after that by the parent company though losses on realization are not expected to approach that amount.

The effect is to translate a deficit of current liabilities over current assets of £609,000 into a surplus of current assets over current liabilities of £156,000.

In addition the company has arranged with stockbrokers Joseph Sebag to allow holders of up to 100 shares to sell without dealing costs.

This is not an invitation to sell your shares but small shareholders may wish to be "out", and this proposal provides the opportunity", commented Mr Kenny.

Options

Interest on the traded options pitch hotted up again yesterday taking turnover back through the 1,000 level.

Grand Metropolitan was the most active stock, with most of the business being done in the January options. The heavy-weight stock BP also saw a bit of trade and some dealers see the price of the options as cheap, compared with the rest of the market.

Although the underlying price of Boots shed 2p to 189p yesterday, there was 60 contracts done in the November 260, which is currently trading at 9p to 10p.

There was also increased activity in the conventional options market where a put was arranged in BP and doubles in Rascal Becton and BP. Among the stocks calls were arranged in cash, London, Northern, Ladbroke and Mersey Docks.

Meyer share buying and ITC acquisition

Defensive tactics rather than timber war

Montague L. Meyer's heavy share-buying in International Timber Corporation and Bambergers, and ITC's purchase of George F. Phillips, a Wallingford timber merchant, last week suggest we are about to witness a new phase of rationalization within the sector. One view, however, is that these moves are defensive tactics designed to protect the large timber groups from the ups and downs of the market rather than a strategy to wage war within the industry itself.

Montague L. Meyer's original acquisition of a 10 per cent stake in International Timber was intended to warn off predators, particularly from North America, who might have considered making a bid for ITC. Suspicions were aroused, however, when Meyer, following International's £7.7m bid for Bambergers, began increasing his stake to avoid dilution of its holding if and when the agreed cash share bid for Bambergers went through. Earlier this week, Meyer's holding reached 15.75 per cent with the purchase of a 250,000 block of ITC shares, which is almost 4 per cent more than it needs to maintain its stake at 12 per cent following a conversion of loan stock later this month. But stock market analysts are convinced that the possibility of Meyer

making a counter bid for Bambergers or attempting to take over ITC is remote. The threat of a Monopolies Commission investigation is an obvious and major deterrent to such a merger. The last Monopolies report on the timber industry was in 1953, which in itself could push the Office of Fair Trading into recommending an investigation if a bid was made.

But the power of labour in the docks acts as an equally powerful threat to any timber group.

An increase in dock handling facilities created by a merger between two large timber groups would have to be cut back to ensure efficiency and profitability. But the power of the dock unions is such that any redundancies or cuts in working hours could result in blacking of all the enlarged group's dock facilities.

A third problem for the timber industry is finding suitable management teams to run an increased business. If the ITC bid for Bambergers goes through (and it is likely to be approved since the two Bambergers brothers, who are nearing retirement age, have had long connections with ITC and hold a 10 per cent stake in the company), ITC will have to prove that it can manage the new group.

It is estimated it will produce £180m

in combined turnover, com Meyer's £220m a year.

The benefits of the merger timber expert described as a pan in terms of a general industry will be to increase the size of Bambergers will contribute the south and south-west of ITC's 30 outlets, based in the acquisition of George F. Phillips, another link in the expansion of materials division. It will branch off the Norwich-based Sons, which has 29 timber merchants and six sawmills.

As Mr Thomas Mac

FINANCIAL NEWS

Utd City Merchants' exceptional provisions hit pre tax

By Peter Wainwright

Optimism is the keynote of United City Merchants—the interim bulletin last March spoke of “active” trading and confidence in a further good year—but several things went wrong in the year that ended on June 30. However, the dividend is up a tenth to 12.5p a share.

Turnover went down from £165.46m to £148.45m but it was left to exceptional provisions, mainly debts that arose the year before to knock pre-tax profits from £4.18m to £2.77m. Additionally tax is higher than usual because debts overseas do not qualify for tax relief until next year.

The provision reflects a bad debt in South Africa and it is put down by Mr Eric Sosnow, chairman, to pure commercial bad luck. He is confident that it is not recurring. He is also optimistic about the short run, and he points out that since UCM is largely a trader there, the investment in relation to the turnover of £22m a year is small. The drop in turnover, however, cannot be so explained. The signs were pointing that way even so. In the half year to December 31 this international merchanting, banking and

leather group slipped from £90.86m to £89.9m though profits were up a tenth.

Among the culprits, according to Mr Sosnow were UCM's interests in timber and leather. Pharaoh Game (timber) saw sales drop from £73.95m to £66.45m with pre-tax profits sliding from £453,000 to £373,000. Here again there was a provision for an overseas debt.

Over at Stimpson Perkins (leather) sales more than held their own by moving from £6.57m to £6.62m but pre-tax profits fell from £703,146 to £511,864.

These reverses and the South African bad debt account for all the pre-tax setback apart from £182,000 which presumably reflects sluggish international trade and a strong pound, items that held back other overseas traders.

Besides the dividend increase the directors have set aside £175,000 in reserves towards the day when this too can be paid out. In total this is nearly equal to the sum actually distributed in dividend this year. There is also to be a one for eight scrip issue. But the shares fell 6p to 57p even though business is once again described as active and prospects “favourable”.

US foothold in a Lloyd's broker

The Swift & Crawford Group

of the United States has purchased 20 per cent of Harris & Dixon Insurance Brokers (Holdings), which owns Harris & Dixon (Insurance Brokers), one of the oldest Lloyd's brokers, having been established in 1797. The Swift & Crawford Group, headquartered in Los Angeles, are a subsidiary of Continental Corporation, a diversified financial corporation ranked by *Fortune* magazine as the tenth largest in the United States. The purchase only affects the insurance-broking interests of Harris & Dixon which through its operating companies is involved in ship-broking, airfreight, underwriting agencies, industrial and other activities.

MFI FURNITURE CENTRES
Chairman says that with sales currently running over 50 per cent ahead of last year, he expects to report continuing good results at the interim stage.

MACALLAN-GLENLIVET
Scottish whisky company is once more moving ahead, but a less optimistic pace, chairman says annual report. Board confident that company will benefit from general advance.

WEMYS INVESTMENT
Pre-tax profit for year to September 30, £593,900 (£543,200). Final dividend, 11.7p gross (10p gross), making 18.6p gross (16p gross).

GEORGE M. CALLENDER
Turnover for six months to June 30, £2.6m (£2.5m). Pre-tax profit, £183,000 (£254,800). Earnings per share 1.4p (1.7p). Interim dividend 0.96p gross (same).

UNITED KINGDOM PROP
Pre-tax profit for six months to September 30, £427,000 (£238,000). Earnings per share 0.49p (0.36p).

Eurobond prices (midday indicators)

US STRAIGHTS (\$)	Bid	Offer
Australia 9 1/2 1980	94 1/2	95 1/2
Belgium 10 1/2 1980	94 1/2	95 1/2
Canada 10 1/2 1980	94 1/2	95 1/2
France 10 1/2 1980	94 1/2	95 1/2
Germany 10 1/2 1980	94 1/2	95 1/2
Italy 10 1/2 1980	94 1/2	95 1/2
Japan 10 1/2 1980	94 1/2	95 1/2
Netherlands 10 1/2 1980	94 1/2	95 1/2
Spain 10 1/2 1980	94 1/2	95 1/2
Sweden 10 1/2 1980	94 1/2	95 1/2
Switzerland 10 1/2 1980	94 1/2	95 1/2
UK 10 1/2 1980	94 1/2	95 1/2
USA 10 1/2 1980	94 1/2	95 1/2

FLOATING RATE NOTES	Bid	Offer
Chang Shanghai 1980	94 1/2	95 1/2
Chang Hong Kong 1980	94 1/2	95 1/2
Chang London 1980	94 1/2	95 1/2
Chang New York 1980	94 1/2	95 1/2
Chang Paris 1980	94 1/2	95 1/2
Chang Rome 1980	94 1/2	95 1/2
Chang Tokyo 1980	94 1/2	95 1/2
Chang Zurich 1980	94 1/2	95 1/2
Chang Amsterdam 1980	94 1/2	95 1/2
Chang Frankfurt 1980	94 1/2	95 1/2
Chang Milan 1980	94 1/2	95 1/2
Chang Vienna 1980	94 1/2	95 1/2
Chang Warsaw 1980	94 1/2	95 1/2
Chang Prague 1980	94 1/2	95 1/2
Chang Budapest 1980	94 1/2	95 1/2
Chang Sofia 1980	94 1/2	95 1/2
Chang Belgrade 1980	94 1/2	95 1/2
Chang Zagreb 1980	94 1/2	95 1/2
Chang Ljubljana 1980	94 1/2	95 1/2
Chang Bratislava 1980	94 1/2	95 1/2
Chang Bucharest 1980	94 1/2	95 1/2
Chang Cluj 1980	94 1/2	95 1/2
Chang Timisoara 1980	94 1/2	95 1/2
Chang Galati 1980	94 1/2	95 1/2
Chang Iasi 1980	94 1/2	95 1/2
Chang Sibiu 1980	94 1/2	95 1/2
Chang Buzau 1980	94 1/2	95 1/2
Chang Vaslui 1980	94 1/2	95 1/2
Chang Ialoveni 1980	94 1/2	95 1/2
Chang Suceava 1980	94 1/2	95 1/2
Chang Botosani 1980	94 1/2	95 1/2
Chang Giurgiu 1980	94 1/2	95 1/2
Chang Braila 1980	94 1/2	95 1/2
Chang Mehadia 1980	94 1/2	95 1/2
Chang Drobeta 1980	94 1/2	95 1/2
Chang Urziceni 1980	94 1/2	95 1/2
Chang Pitesti 1980	94 1/2	95 1/2
Chang Ploiesti 1980	94 1/2	95 1/2
Chang Buzau 1980	94 1/2	95 1/2
Chang Vaslui 1980	94 1/2	95 1/2
Chang Ialoveni 1980	94 1/2	95 1/2
Chang Suceava 1980	94 1/2	95 1/2
Chang Botosani 1980	94 1/2	95 1/2
Chang Giurgiu 1980	94 1/2	95 1/2
Chang Braila 1980	94 1/2	95 1/2
Chang Mehadia 1980	94 1/2	95 1/2
Chang Drobeta 1980	94 1/2	95 1/2
Chang Urziceni 1980	94 1/2	95 1/2
Chang Pitesti 1980	94 1/2	95 1/2
Chang Ploiesti 1980	94 1/2	95 1/2

CONTRACTS AND TENDERS

DEMOCRATIC AND POPULAR REPUBLIC OF ALGERIA

MINISTRY OF LIGHT INDUSTRIES

NATIONALE DES INDUSTRIES CHIMIQUES

(National Corporation for the Chemical Industries)

INTERNATIONAL INVITATION TO TENDER

No. MPM/01/79

Société Nationale des Industries Chimiques invites international tenders for the supply of gums, food colourings and textile dyes, flavourings, inks and various other products for which the Corporation has a monopoly.

Tender specifications are available to interested parties against payment of (100) one hundred Algerian dinars from Division des Achats, 29 rue Didouche Mourad, Algiers, Algeria. Tel.: 52521 SONAMER.

Tenders must reach the above address by 20 November, 1978, without fail and should be sent in two sealed envelopes, the inner one to be marked "Appel d'Offres No. MPM/01/79—A ne pas ouvrir".

Bidders will be bound by their offers for 90 days from the closing date.

DEMOCRATIC AND POPULAR REPUBLIC OF ALGERIA

MINISTRY OF LIGHT INDUSTRIES

SOCIÉTÉ NATIONALE DES INDUSTRIES CHIMIQUES

(National Corporation for the Chemical Industries)

INTERNATIONAL INVITATION TO TENDER

No. MPE/02/79

SNIC invites international tenders under No. MPE/02/79 for the supply of raw materials and packaging for its factories producing paints, detergents, cosmetics, glass, ceramics, cleaning materials, foil and corrugated paper.

Tender specifications are available to interested parties against payment of one hundred (100) Algerian dinars from Division des Achats, 29 rue Didouche Mourad, Algiers, Algeria. Tel.: 52521 SONAMER.

Tenders must reach the above address by 20 November, 1978, without fail and should be sent in two sealed envelopes, the inner one to be marked "Appel d'Offres No. MPE/02/79—A ne pas ouvrir".

Bidders will be bound by their offers for 90 days from the closing date.

LEGAL NOTICES

No. 003321 of 1978

In the High Court of Justice, Chancery Division, in the Matter of

MATTSON SYSTEMS LIMITED and

MATTSON SYSTEMS (UK) LIMITED

vs. The Liquidator of the above-named companies

Notice is hereby given that a

petition for the winding up of

the above-named companies was

presented to the High Court of

Justice, Chancery Division, on the

14th day of October, 1978, by

the Liquidator of the above-named

companies, and that the said

petition is now on for hearing on the

18th day of November, 1978, at

the High Court of Justice, Chancery

Division, at 11.30 a.m. and that

any person who wishes to oppose

the said petition must do so by

presenting a counter-petition to the

High Court of Justice, Chancery

Division, on or before the 14th day

of November, 1978, and that the

said counter-petition must be

served on the Liquidator of the

above-named companies, and that

the said counter-petition must be

supported by evidence, and that

the said counter-petition must be

filed with the High Court of Justice,

Chancery Division, and that the

said counter-petition must be

served on the Liquidator of the

above-named companies, and that

the said counter-petition must be

supported by evidence, and that

the said counter-petition must be

filed with the High Court of Justice,

Chancery Division, and that the

said counter-petition must be

served on the Liquidator of the

above-named companies, and that

the said counter-petition must be

supported by evidence, and that

the said counter-petition must be

filed with the High Court of Justice,

Chancery Division, and that the

said counter-petition must be

served on the Liquidator of the

above-named companies, and that

the said counter-petition must be

supported by evidence, and that

the said counter-petition must be

filed with the High Court of Justice,

Chancery Division, and that the

said counter-petition must be

served on the Liquidator of the

above-named companies, and that

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supported by evidence, and that

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filed with the High Court of Justice,

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manufacturer is able to engineering excellence of the intrinsic quality of the coachbuilding craftsmen. The customer has to expect that the car 792 should have an abundance and preferably exclusive—this is how much it costs today Daimler Double-Six Vanden Plas is three times the £5,439 model was announced six months ago. The car is a burden of inflation, in this price bracket has a reputation of being the most exclusive car in the world. It is more a face-to-face with opposition on higher priced and which the highest possible standards of refinement, accommodation and in other words, this flagship has to be judged by the

most exacting standards.

With this in mind, a full week in the company of a Double-Six Vanden Plas has been a most enlightening experience. In certain small details the car is beginning to show its age (the original Jaguar XJ design, on which it is based, is now more than ten years old), and if it were being designed today no doubt it would be packaged more efficiently (a more usefully-shaped luggage trunk is justified on a car longer than any other British saloon save the Rolls-Royce, Bentley and futuristic Lagonda). Nevertheless it still has, I feel, no peer in what I can best describe as sheer refinement of performance.

Its dynamic qualities (of which more anon) are of the highest order and manner of a car bred for competition rather than for luxury travel. But it is the manner in which these have been blended, through judicious original design and meticulous subsequent development, into a body structure with such outstanding noise insulation in the passenger area, that stamps this car as one of the great designs of modern times.

Stand next to the car with the engine running and you will not need reminding that a V12 power unit has a great many moving parts; the sound, though not particularly obtrusive, is what you might expect from a piece of complicated and powerful (285 bhp) machinery tightly packaged with ancillary equipment and seemingly occupying every cubic inch of the underbonnet area (where, incidentally, all but the most technically proficient should fear to tread).

But ship behind the wheel, close the door and seal the windows (by electric switches, of course) and it is rather like entering a soundproofed studio. There is

just the faintest background hum, and even this is drowned should you switch the air-conditioning system fan to its lowest speed. Motor away and you find that the unobtrusiveness of this torque-laden engine is matched by a transmission (the latest General Motors unit) so smooth that only by reference to the relative needle positions of the rev counter and speedometer can you confirm which gear range you are using.

A whisper of throttle is all that is needed for most urban driving, but the majesty of this engine is revealed when you read more boldly on the accelerator for overtaking: the response is immediate, the acceleration almost dramatic and the manoeuvre completed with an impressive economy of road. The lack of noise or fuss means that one can all too easily underestimate one's true speed. Accelerating from rest to the 70 mph speed limit in less than 10 seconds feels completely unexciting, which is perhaps as it should be bearing in mind that the car is still travelling at less than half its maximum speed. A cruising speed (where permitted) of more than 100 mph is a leisurely gait, which can be reached within 20 seconds of releasing the handbrake.

Of course, accelerating two tons of car so vigorously is a chivalry business, and at the end of a week which included much urban and suburban driving the fuel consumption was only a fraction better than 13 mpg.

Much has been written about the over-engineering of Jaguar/Daimler power steering. I can only say that on this test car it felt a little less light than on earlier examples and was in keeping with the overall character of the car. Were the chassis less responsive to subtle steering



The new Daimler Double-Six Vanden Plas: an enlightening experience.

movements, maybe there would have been more cause for criticism, but certainly at no time did servo action prevent me from retaining adequate "feel" of the front wheels.

Admirably damped suspension with meticulously thought-out geometry is a cornerstone of the car's impressive handling and ride characteristics. The independent rear-wheel system, embodying dual coil springs, radius arms and transverse links, must be among the best in the world and, like the front suspension, it is built into a subframe which is rubber-

insulated from the main body structure. Therein lies the secret of near-silence. Suitably large disc brakes (those at the front being ventilated) require only a light pressure for normal usage, and progressively more effort at higher speeds if bringing the car to a complete halt.

The highest quality materials have been used to furnish and equip this car as a luxurious four-seater (profiled individual rear seats flank a large central armrest). After 24,000 miles there was not a vestige of crinkling, sagging or surface wear on any of the seats. Indeed, if anything, they

had yielded insufficiently. For example, I would have expected—and hoped—that the front roll of the cushion would have become a little more pliable and therefore more comfortable beneath the thighs.

Air-conditioning equipment that could chill or roast at the turn of a rotary switch (though I never did learn to master its more subtle adjustments), the centralized door locking, built into the front console, the abundance of walnut, the nylon passenger rugs over the deep carpets, the mass of convenience equipment (lights, mirrors, lighters and ventilation and window switches for each passenger) all contribute to an environment of exclusivity.

Points for criticism were mainly a legacy of age. For example, the old-fashioned umbrella-handle handbrake; instrument dials which suffered from reflections (the more so on the test car, which lacked the leather-trimmed steering wheel now standard across the range); the wiper system which requires an extra movement to park the blades; the lamp switches on the dashboard instead of on column-mounted stalks; a long, wide but much too shallow luggage trunk; and a black mark nothing to do with age—surely an excellent transmission deserves a more positive action for the shift lever. Perhaps some of these things will be attended to when the Series 3 version of this admirable design appears some time next year. One final thought: for those for whom nearly £17,000 is out of reach, the XJ Whitworth, with its fewer frills, but with the relative economy of the 3.4-litre XJ engine, begins at "only" £9,662.

John Blunsden

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Broadcasting Guide

Edited by Peter Davalle

PERSONAL CHOICE



Sounds Like Friday (BBC 2, 10.15)

ken comes before the egg, not the other way round. This is the order of precedence as laid down in a today. One-chicken, on Thames, sees highbrow and Jean Weisman demonstrating le range of recipes that incorporate chicken, ready at the thought of Creamed Chicken omelette and Buttermilk. Then, at 7.35 on BBC 2, a flourish by Della Smith before she can away the veil of mystery that separates the from the perfect soufflé. Miss Smith's ies shows that the BBC has a lot of faith reach of Miss Smith's culinary knowledge life expectancy. The series consists of ns and extends over a period of three years.

de seems to have come up with something of a complete and unobstructed access to the ngs of the Merseyside police force, spent a month with the officers and men, filmed suspects led, charged, locked up and subsequently by the CID and went out with police when they igating assaults on officers, hit and runs, lents and break-ins. The results will be screened, ide every Friday night, starting tonight, and for the eks. Hugh Williams, the programme's editor, says ce force has ever opened itself up to examination It is an indication, he thinks, of the confidence their policing policies. Also, surely, of the they have in Nationwide.

remember all the fuss that surrounded the birth of illiamson's Mass of Christ the King which he wrote the Queen's Silver Jubilee and to mark the -ersary of the Three Choirs Festival in Gloucester r Williams was not able to put 'flits in time and so the church work had to be given, to form, at the festival. Tonight, for the first time 00) we shall hear the whole work. It is broadcast Westminster Cathedral, with some distinguished Three Choirs Festival Chorus and the armonic Orchestra conducted by Sir Charles Groves.

it is now something of a national institution, great deal how well the chairman of My World 1 27) integrates with the witty quartet who make L Jack Longland was the perfect chairman, receptive, self-effacing and clearly well liked t John Julius Norwich is slowly easing his t personality into the game. He is already a sound less senatorial, and when he learns to programme as much as the panel and the listeners do, even better.

IE SYMBOLS MEAN: † STEREO; * BLACK AND † REPEAT.

TELEVISION

BBC 1

9.30 am, For Schools, colleges (until 10.45): 9.30, Canoe (in the surf); 10.00, Look and Read (Sky Hunter, 6); 10.23, Fenners Windows; 10.45, You and Me: for four and five-year-olds; 11.05, For Schools, colleges (until 12.25 pm); 11.05, Location: Britain (Lymouth); 11.30, A Job Worth Doing (Laboratory work); 12.00, Business World (Business at Law); 12.45, News and weather; 1.00, Pebble Mill: including Peter Seabrook's look at gardens and gardeners in the United States; 1.45, Heads and Tails: stories for the kiddies; 2.00, For Schools, colleges (until 3.00); 2.02, Scene (Laura); 2.35, General Studies (before the Romans); 3.55, Play School: Susanna Grell's story The Bears Who Stayed Indoors; 4.20, Hong Kong Phooey: cartoon; 4.30, The Batty Bank Gang; 4.30, Jackanory: Rosemary Leach reads Nicholas Stuart Gray's How Mice are Moonshine?; 4.45, Captain Caveman: cartoon; 4.55, Crackerjack: children's magazine programme, with Ed Stewart as MC; 5.40, News, with Angela Rippon; 5.55, Nationwide: including the results of a series of Friday night items about the Mersey-side police in action. Also includes Desmond Lynam's Sportsweek (see Personal Choice); 7.00, Tom and Jerry: cartoon; 7.10, Star Trek: the monster for the kiddies; 8.00, Going Straight: comedies about a released prisoner (Ronnie Barker); Tonight, his faith in mankind is about to be restored; 8.30, Kings on their Fingers: finally married, the Prides (Martin Jarvis and Diane Keen) go to Brighton for their honeymoon. But much has changed since they went there last; 9.00, News, with Angela Rippon; 9.15, The Desperate Ones (1968). Thriller about two Polish brothers (Maximilian Schell and Raf Vallone) who escape from a Siberian labour camp and head for the Afghan border. Closedown at 12.35 am.

BBC 2

11.00 am, Play School: same as BBC 1; 3.55, Close down at 11.25; 5.35 pm, News, with subtitles for the hard of hearing; 5.40, Laurel and Hardy: Going for the Gold; 6.00, Oliver Twist: involved with an escaped convict and his girl friend. Made in 1934; 6.00, The Voyage of Charles Darwin: repeat of the first instalment of a seven-part series. It takes us up to the departure of the Beagle for South America; 7.00, Mountain Days: new series from Scotland. Tonight, two men and two girls on foot, and on donkey, trek across the Knapdale peninsula; 7.30, News and weather; 7.35, Della Smith's Cookery Course: another new series. Tonight: the versatile egg (see Personal Choice); 8.00, Top Crown: second semi-final of the BBC2 Crown Bowls Tournament from Blackpool. Dave Rawlins meets Roy Nicholson for a place in the final; 8.30, Westminster: yet another new series. David Holmes assesses the Government's prospects for the winter. The series promises a clearer insight into the broad canvas of politics; 9.00, International Tennis: first of two visits tonight (the other is at 11.40) to the Great Britain v USA matches in the Commonwealth Cup at the Royal Albert Hall; 9.25, Horizon: The Beersheva

THAMES

9.30 am, For Schools (until 11.54); 9.30, Leapfrog (maths); 9.47, Starting Out: 10.05, Believe it or Not; 10.23, Experiment (bomb calorimetry); 10.40, The World Around Us; 11.02, My World; 11.15, Picture Box; 11.32, Stop, Look, Listen (Lorry drivers); 11.44, Reading with Lenny; 11.54, Beany and Cecil: cartoon; The Warring Twenties; 12.00, Song Book: melodies for the young, with Kathy Jones, Leo Dove and Johann Heaney; 12.10 pm, Hickory House: kiddie programme. The theme: surprises; 12.30, Country Style: The American visitor is Valerie Jay. The host is Frank Yonco; 1.00, News; 1.20, Thames News: with Robin Houston; 1.30, Farmhouse Kitchen: Chicken recipes, from Dorothy Sleighhouse and Jean Weisman (see Personal Choice); 2.00, Money-Go-Round: items on bargain offers that are not genuine, an insurance firm that would not pay up, and fireworks regulations; 2.25, Film: Climax an Angry Mountain (1972). Made-for-TV film drama with Fess Parker (formerly Davy Crockett) as a sheriff caught up in a hunt for an escaped killer; 4.15, Raven: children's adventure, part 3. The secrets of the cave; 4.45, Maggie: a visit to a Peruvian village of bakers; 5.15, Thames Sport: the week-end's prospects; 5.45, News; 6.00, Thames at 6: local round-up; 6.30, Emmerdale Farm: countryside serial; 7.00, Mixed Blessings: comedy about black, wife, white husband. Tonight, the husband has a money problem; 7.30, General Hospital: First in a new batch of stories about a fictional Midlands hospital. Regular viewers will know what to expect; 8.30, Vegas: drama about a detective (Robert Urich) who is alter a girl's murderer in the gambler's paradise. Veronique stars June Allyson and Tony Curtis are also in the cast; 10.00, News; 10.30, Police Five: Ways in which you can help Scotland Yard; 11.00, Soap: more eyebrow-raising disclosures about two strange American families; 11.10, The London Programme: John Taylor investigates the growing discontent of London's taxi drivers; 12.10 am, George Hamilton IV: the country and western singer, with guests; 12.40, Close: a painting by Munch and music by Bartok.

Radio 4

6.00 am, News, weather, papers, sport; 6.10, Farming; 6.30, Today, 7.00, 8.00, News, 7.30, 8.30, Headlines; 8.35, Parliament; 8.40, News; 9.05, Local Time; 9.35, The Pleasure Principle: Music miscellany; 10.00, News; 10.05, From Our Own Correspondent; 10.30, Service; 10.45, Story: The Red Dress; 11.00, News; 11.05, Down Your Way: Interview, Kincardine, Scotland; 11.45, School Days at Darlington: talk by Clement Freud; 12.00, News; 12.05 pm, You and Yours; 12.27, My Word: Panel game; 12.30, News; 1.00, The World at One; 1.30, The Archers; 1.45, Woman's Hour; 1.55, Listen with Mother; 2.00, News; 2.05, Play: Androcles and the Lion; 2.30, News; 2.35, Mickey Mouse's 50th birthday; 4.35, Story: The Little Nugget; 5.00, News; 5.55, Weather; 6.00, Six O'Clock News; 6.30, Going Places; 7.00, News; 7.05, The Archers; 7.15, The Week; 7.30, Profile; 8.30, Any Questions? 9.15, Letter from America; 9.30, News; 9.59, Weather; 10.00, The World Tonight; 10.30, Book Ending; 10.45, News; 11.00, A Week at Bedtime: Tolstoy Remembered (5).

RADIO

Radio 3

11.15, The Financial World; 11.30, Today in Parliament; 12.00, News, Weather; 12.30-12.35 am, Inshore forecast; 12.45, 6.30 am, Regional News; Weather, 7.50, Regional News; 8.00, News; 8.10, Schools; 10.45, Schools; 12.55 pm, Regional News; Weather, except London and South-east; 2.00, Schools; 5.55, Regional News; Weather; 11.00, Study on 4, Wegweiser (5); 11.30, Close; 6.55, Weather; 7.00, News; 7.05, Concert: Wolf-Ferrari, Faure, Milhaud, Debussy; 8.05, News; 8.10, Concert: A Royal Edition; 9.00, News; 9.05, Composer: Shostakovich; 9.50, BBC Northern Ireland Orchestra; 10.30, Young Artists: Rostislav Beethoven, Schumann, Prokofiev; 11.30, News and Publicising Songs; 11.45 pm, BBC Northern Symphony Orchestra, part 1: Humperdinck, Brahms; 1.00, News; 1.05, Play; 1.30, BBC Northern SO part 2: Bruch, Rimsky-Korsakov; 2.10, Jakob Gimpel piano; Tuck, Williams, Paganini, Schumann; 2.10, Roy Harris concert; 4.20, Songs by Liszt and Richard Strauss; 4.35, Grant Jones, Organ, Royal Chapel, Chelmsford; 4.40, Paganini, Capriccio, London, Fresco; 4.55, Music from Finland by Kokkonen, Salonen; 5.45, Homebound Bound; 6.30, News; 6.35, At Home Guide; Cantelli at Carnegie Hall; 6.55, Smetana chamber music; 7.00, News; 7.05, The Archers; 7.15, The Week; 7.30, Profile; 8.30, Any Questions? 9.15, Letter from America; 9.30, News; 9.59, Weather; 10.00, The World Tonight; 10.30, Book Ending; 10.45, News; 11.00, A Week at Bedtime: Tolstoy Remembered (5).

Radio 2

5.00 am, News, Weather; 5.02, Tony Brandon; 7.35, Terry Wogan; 8.27, Racing Bulletin; 10.02, Jimmy Young; 12.15 pm, Wagoners' Walk; 12.30, Pete Murray's Open House; 1.45, Sports Desk, racing; 2.30, David Hamilton; 2.45, 3.45, Sports Desk; 4.30, Wagoners' Walk; 4.45, Sports Desk; 4.55, John Dunn; 5.45, Sports Desk; 6.45, Sports Desk; 7.02, Jim MacLeod and the Band; 8.02, Neil Richard; 8.10, BBC Radio Ulster; 8.45, Sports Desk; 9.55, Sports Desk; 10.02, Support Your Local Girl; 10.30, Let's Go Latin; Ronnie Hay; 10.45, Sports Desk; 11.00, Tennis; 11.15, Brian Matthews; Round Mid; 12.00, News, Weather; 2.00, 3.02 am, News.

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REGIONAL TV

Southern

9.30 am, Thames; 1.20 pm, Southern Kitchen: Preparing for Christmas; 2.00, Women Only; 2.30, Thames; 3.00, Women Only; 3.30, Thames; 4.00, Women Only; 4.30, Thames; 5.00, Women Only; 5.30, Thames; 6.00, Women Only; 6.30, Thames; 7.00, Women Only; 7.30, Thames; 8.00, Women Only; 8.30, Thames; 9.00, Women Only; 9.30, Thames; 10.00, Women Only; 10.30, Thames; 11.00, Women Only; 11.30, Thames; 12.00, Women Only; 12.30, Thames; 1.00, Women Only; 1.30, Thames; 2.00, Women Only; 2.30, Thames; 3.00, Women Only; 3.30, Thames; 4.00, Women Only; 4.30, Thames; 5.00, Women Only; 5.30, Thames; 6.00, Women Only; 6.30, Thames; 7.00, Women Only; 7.30, Thames; 8.00, Women Only; 8.30, Thames; 9.00, Women Only; 9.30, Thames; 10.00, Women Only; 10.30, Thames; 11.00, Women Only; 11.30, Thames; 12.00, Women Only; 12.30, Thames; 1.00, Women Only; 1.30, Thames; 2.00, Women Only; 2.30, Thames; 3.00, Women Only; 3.30, Thames; 4.00, Women Only; 4.30, Thames; 5.00, Women Only; 5.30, Thames; 6.00, Women Only; 6.30, Thames; 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